Administration Report on the Railways in India for the years 1904 & 1905

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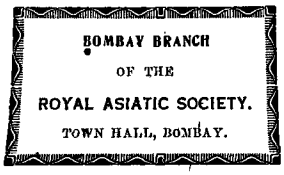

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ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR THE

Calendar years 1904 & 1905

BY

13450C

THE RAILWAY BOARD.

Dated the 24th May 1905.

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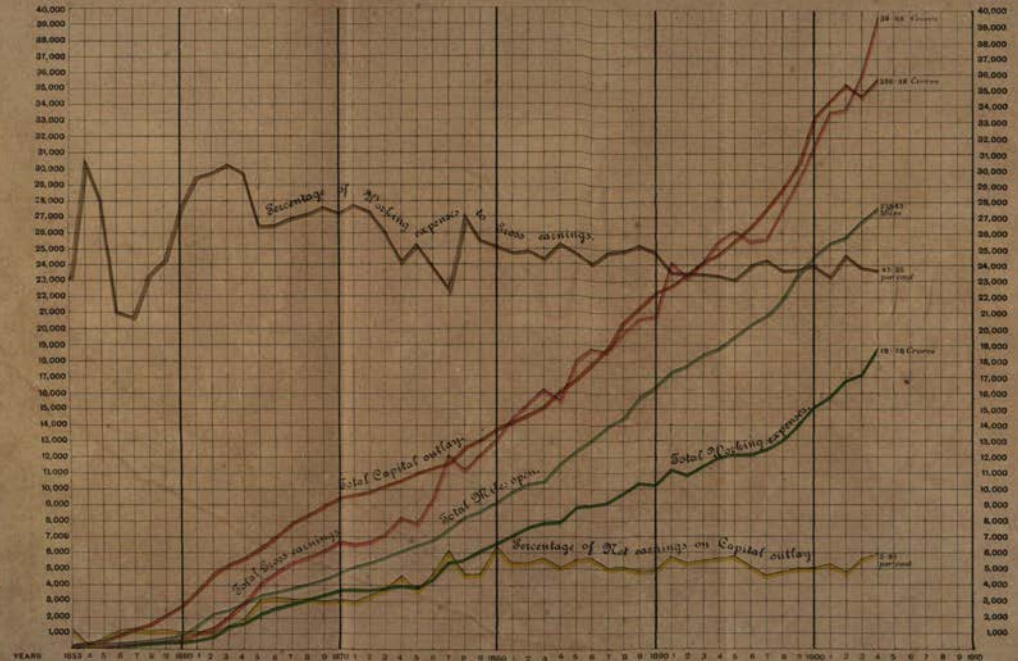
INDIAN RAILWAYS.

Diagram showing for each year the totals up to 31st December 1904 for Capital outlay, Gross earnings, Working expenses, and length in Miles open, also percentage of Net earnings on Capital outlay and percentage of Working expenses to Gross earnings.

The figures on this scale represent lakhs for the Capital outlay, tens of thousands for Gross earnings and Working expenses and Miles for length open.

In the case of percentage of Net earnings on Capital outlay, and percentage of Working expenses to Gross earnings, each square represents one and two per cent. respectively.



The decrease in the Total Capital outlay in 1902 is due to revision of the outlay hitherto adopted for lines purchased by the State from Guaranteed Railway Companies.

Litho., S. I. O., Calcutta.

JHARIA & RANEEGUNGE COAL FIELDS.
RAILWAY SYSTEM
OF
INDIA
Corrected up to 30th April 1905.
BOMBAY.
CALCUTTA
MADRAS.
CAWNPORE JN.
CANTONMENT

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ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR

THE CALENDAR YEAR 1904.

General.

The Railway Board in issuing the report for 1904 have considerably reduced it in size by omitting statistics (Appendices 4, 6, 12 to 16, 19 to 21, 36 and 37) that appeared of no practical use.

One new table (Appendix 39) of purely academic interest to the railway world has been added, showing the comparison of the division of working expenses on the principal railways for goods and passengers proportionately for receipts, ton-miles, and train-miles of each.

In this report the 5′ 6″ gauge is called the standard and the 3′ 3⅜″ the metre gauge.

Mileage.

2. During the year 1904, 621 miles of line were opened to traffic, bringing up the total mileage to 27,565 miles of the following gauges :—

14,733	of	5′ 6″ gauge.
11,562	„	3′ 3⅜″ „
942	„	2′ 6″ „
328	„	2′ 0″ „
27,565.		

There were 850 miles of line sanctioned during the year—

306	of	5′ 6″ gauge.
212	„	3′ 3⅜″ „
251	„	2′ 6″ „
81	„	2′ 0″ „
850.		

Up to the latest date of returns (end of April 1905) the mileages were—

Lines open	27,904
Lines under construction and sanctioned	3,055

Capital.

3. The Capital outlay on open lines and lines partly open amounted at the close of the calendar year 1904, to Rs. 35,285·95 lakhs, and that on lines wholly under construction to Rs. 261·91 lakhs. In addition Rs. 88·36 lakhs were incurred on miscellaneous items connected with railways. The total outlay amounted to Rs. 35,636·22 lakhs.

4. For the official year 1905-06, provision has been made as follows:

	Rs. Lakhs.
(*a*) For open lines, including rolling-stock	558·01
(*b*) For lines already under construction—	
(*i*) Begun prior to 1904-05	406·96
(*ii*) Begun during 1904-05	232·88
(*c*) For lines to be begun in 1905-06	52·15
TOTAL .	1,250·00

As usual, the needs of open lines especially in regard to rolling-stock, and lines already under construction, have received first consideration.

Rolling-stock.

5. In 1904, 130 engines, 337 coaches and 4,868 wagons were added to the rolling-stock of the railways, and there are under supply 360 engines, 1,408 coaches and 4,376 wagons.

Subsequent to the 31st December 1904, the provision of 103 engines, 165 coaches and 2,026 wagons has, in addition, been authorized.

6. Two hundred and seventy engines, 669 coaches and 875 wagons were fitted with automatic brakes, bringing the number so fitted at the close of the year up to 2,630 engines, 10,401 coaches and 2,883 wagons, as against 2,929 engines, 9,491 coaches and 105,281 wagons not fitted.

7. Six hundred and fifty-six vehicles were fitted with gas and electricity, bringing the total number so fitted at the close of the year up to 9,870, as compared with 7,622 not fitted. The number fitted with gas was 9,385 and with electricity 485.

8. One hundred and fifty-one stations were fitted with apparatus for interlocking points and signals. The progress in the introduction of automatic instruments for signalling trains between stations continues, 92 stations having been provided with these instruments.

Statistical results of working.

9. With an addition of 621 miles to the open mileage, the gross earnings of all Indian railways, during the calendar year 1904 compared with 1903, amounted in round figures to Rs. 3,964·97 lakhs against Rs. 3,600·82 lakhs, an increase of Rs. 364·15 lakhs. Of the increase in the earnings, Rs. 166·41 lakhs were absorbed in additional working expenses. The net earnings amounted to Rs. 2,087·47 lakhs against Rs. 1,889·73 lakhs, or an increase of Rs. 197·74 lakhs. These net earnings yielded a return on the Capital outlay on open lines and lines partly open (Rs. 35,285·95 lakhs) of nearly 6 per cent., which is an improvement of about ½ per cent. over the return yielded in 1903.

Of the increase of Rs. 364·15 lakhs in the gross receipts, the North Western State railway earned Rs. 129·98 lakhs or 36 per cent., the East Indian railway earned Rs. 60·64 lakhs or 17 per cent., and the remainder was contributed principally by the Bengal-Nagpur, Great Indian Peninsula, Madras, Burma and Southern Mahratta railways.

The development of passenger traffic noticed in the last report, continued during the year under review, and a larger number of pilgrims, native marriage parties, visitors to fairs, etc., were carried by railway. The total number carried was 227·10 millions against 210·23 millions, and the earnings therefrom Rs. 1,176·20 lakhs against Rs. 1,098·14 lakhs. The number of third class passengers carried was more by 15·36 millions and the earnings by Rs. 73·32 lakhs. The other classes also showed satisfactory increases. Of the increase of Rs. 78·06 lakhs in the passenger receipts, the Great Indian Peninsula railway earned Rs. 15·53 lakhs or 20 per cent., and the remainder was contributed principally by the Bengal-Nagpur, North Western State, Bombay, Baroda and Central India, and Oudh and Rohilkhand State railways.

The average rate charged to passengers per mile was 2½ pies, just over ⅛th of a penny, and the average distance travelled was about 40 miles. There have been no material fluctuations in these figures since 1884.

The aggregate tonnage of goods lifted during the year 1904 and the earnings therefrom were 52·05 million tons and Rs. 2,518·81 lakhs respectively; an improvement over the previous year of 4·37 million tons and Rs. 276·89 lakhs. Of the increase in the goods receipts, the North Western State railway earned Rs. 123·85

lakhs or 45 per cent., the East Indian railway earned Rs. 56 60 lakhs or 20 per cent., and the remainder was contributed principally by the Bengal-Nagpur, Madras, Burma, Southern Mahratta, Oudh and Rohilkhand State and Rajputana-Malwa railways.

The total weight of the traffic in "Grain and pulse", "Cotton, raw and manufactured", "Coal," "Oil-seeds", "Sugar," "Salt", and "Jute" during the year 1904 amounted to 27·77 million tons and the earnings therefrom to Rs. 1,689·81 lakhs against 24·92 million tons and Rs. 1,489·37 lakhs in the previous year. The traffic in these commodities amounted during the past two years to about 71 per cent. both in weight and in earnings of the total traffic carried for the public.

There was a large increase of 1·18 million tons and Rs. 123·77 lakhs in the wheat traffic included under "Grain and pulse", which is chiefly attributed to good crops and to an increase in the export demand. A brisk export trade in linseed and rape and mustard seeds increased the traffic under "Oil-seeds" by 165 thousand tons and Rs. 16·62 lakhs. Under "Grain and pulse", rice in the husk also showed an increase of 225 thousand tons and Rs. 11·32 lakhs, consequent on a bumper harvest in Burma and a brisk movement of the commodity to Bombay. There was a falling off in the outturn in the cotton producing districts of India in consequence of unseasonable rains, which resulted in a decrease of 11 thousand tons and Rs. 18·83 lakhs in the traffic carried by railways.

Coal.—During the year 1904, the total output from the collieries in India and Burma amounted, as shown in Appendix 28, to 8·23 million tons against 7·44 million tons in 1903. The exports of Indian coal to Indian ports, principally Calcutta to Bombay, Karachi and Madras, rose from 1·24 million tons to 1·45 million tons or by 210 thousand tons, and those to ports outside India including Burma from 723·87 thousand tons to 896·88 thousand tons or by 173·01 thousand tons, principally Calcutta to Rangoon and Ceylon. The imports of coal from the United Kingdom rose from 133·71 thousand tons to 174·71 thousand tons or by 41 thousand tons, and those from other countries, from 30·43 thousand tons to 79·17 thousand tons or by 48·74 thousand tons. This was probably due to the fall in value of coal in England and low freights.

The total quantity of Indian coal consumed by railways during the year 1904 increased, as shown in Appendix 27, from 2·20 million tons to 2·45 million tons or by 250 thousand tons, while the amount of foreign coal consumed fell from 17·70 thousand tons to 17·43 thousand tons.

The improvement in the traffic in coal carried by railways was due principally to the increase of 604·49 thousand tons and Rs. 20·34 lakhs recorded by the East Indian railway, owing to larger despatches from colliery stations for foreign railways and for export. On the Bengal-Nagpur railway the quantity carried increased by 106·25 thousand tons but the earnings were less by Rs. 1·12 lakhs. The increase in weight is partly accounted for by heavy consumption on railways and by private factories and partly by greater demand in Calcutta for shipment, while the decrease in earnings occurred because the Bengal-Nagpur railway were not permitted to quote below Government minimum rates, and consequently the Radhanagar coal for export was carried over the East Indian railway route *viâ* Asansol.

The average rate for all descriptions of goods carried per ton per mile, *viz.*, 5¼ pies, or just under ½ penny, was the lowest recorded since 1884, in which year the rate was 7¼ pies; while the average distance over which a ton of goods was carried, *viz.*, 172 miles, was the highest.

The additional mileage worked, the larger traffic handled and the increase in the train-mileage run, necessitated a corresponding increase in the working expenses, and although large sums were expended by the principal railways in renewing their permanent-way and rolling-stock, and in strengthening bridges and repairing damages caused by floods, the railways were worked during 1904 at a slightly lower percentage of gross earnings, *viz.*, 47¼ against 47½ per cent. in the previous year.

Financial results to the State.

10. The financial result of the working of the State and Guaranteed railways for the year 1904 was a net gain to the State of 263·22 lakhs of rupees, the largest

yet obtained in any year, after meeting, in addition to the expenses of working, all charges for interest on Capital outlay by the State and on Capital raised by Companies, and also the annuity payments for railways purchased by the State, including both interest and the portion that represents redemption of Capital. This is the fifth year in succession in which there has been a surplus.

In the subjoined table, which gives details of the charges against Revenue for the year 1904 in comparison with the two preceding years, the ordinary interest charges are first deducted, and on this basis, *i.e.*, after excluding the portion of the annuity payments representing redemption of Capital, Rs. 95·02 lakhs, the surplus to the State for the year 1904 amounts to Rs. 358·24 lakhs. It is to be noted that even this understates the real surplus derived from the railways open to traffic, as the interest charges include the interest on outlay on lines under construction, which, if these lines were being constructed by private enterprise, would be charged to the Capital account.

The results for the two old Guaranteed railways, the Bombay, Baroda and Central India and the Madras railways, are shown in a separate column in this table in order to bring out the unfavourable effect to the State of the higher rate of guaranteed interest (5 per cent.) paid on nearly the whole Share Capital of these lines. On these two railways taken together there was a net loss to the State of over 21 lakhs of rupees, the loss on the Madras railway being nearly 23 lakhs, while there was a surplus of over 1·5 lakhs on the Bombay, Baroda and Central India railway.

	1902.			1903.			1904.		
	State railways.	Guaranteed railways. (*Madras and Bombay, Baroda and Central India.*)	Total.	State railways.	Guaranteed railways. (*Madras and Bombay, Baroda and Central India.*)	Total.	State railways.	Guaranteed railways. (*Madras and Bombay, Baroda and Central India.*)	Total.
Revenue.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross traffic earnings.—State railways	28,08,53,109	...	28,08,53,109	29,80,67,796	...	29,80,67,796	32,91,95,009	...	32,91,95,009
Gross traffic earnings.—Guaranteed railways.	...	2,75,84,610	2,75,84,610	...	2,95,84,050	2,95,84,050	...	3,15,88,927	3,15,88,927
Repayment of advances of interest.—Subsidized railways	7,63,462	...	7,63,462	6,24,981	...	6,24,981	7,22,765	...	7,22,765
Total Revenue	28,16,15,571	2,75,84,610	30,92,00,181	29,86,92,757	2,95,84,050	32,82,76,807	32,99,17,774	3,15,88,927	36,15,06,701
Expenditure.									
Working expenses.—State railways.	13,79,71,192	...	13,79,71,192	14,07,14,317	...	14,07,14,317	15,45,20,716	...	15,45,20,716
Working expenses.—Guaranteed railways.	...	1,38,55,568	1,38,55,568	...	1,55,20,985	1,55,20,985	...	1,59,28,480	1,59,28,480
Share of surplus profits paid to Companies.—Guaranteed railways.	...	12,93,644	12,93,644	...	15,12,518	15,12,518	...	18,91,136	18,91,136
Share of surplus profits paid to Companies.—State railways	37,56,901	...	37,56,901	40,20,925	...	40,20,925	52,91,851	...	52,91,851
Land and Supervision charges—Guaranteed railways	...	—95,699	—95,699	...	—1,730	—1,730	...	—1,18,321	—1,18,321
Land and subsidy charges.—	6,94,436	...	6,94,436	3,04,446	...	3,04,446	7,58,615	...	7,58,615
Miscellaneous railway expenditure.—	10,55,292	...	10,55,292	10,07,603	...	10,07,603	8,73,905	...	8,73,905
Total expenditure	14,34,77,771	1,50,53,520	15,85,31,291	14,60,47,191	1,70,31,713	16,30,78,904	16,14,45,087	1,77,01,295	17,91,46,382
Net Revenue	13,81,37,800	1,25,31,090	15,06,68,890	15,26,45,566	1,25,52,337	16,51,97,903	16,84,72,687	1,38,87,632	18,23,60,319
Ordinary Interest charges.									
Interest on Capital outlay.—State railways	4,72,80,834	...	4,72,80,834	4,92,56,942	...	4,92,56,942	5,17,94,417	...	5,17,94,417
Interest on debt for purchase of railways	1,79,05,187	...	1,79,05,187	1,77,70,974	...	1,77,70,974	1,77,75,082	...	1,77,75,082
Interest on advances of Capital to Companies	54,29,993	...	54,29,993	59,82,593	...	59,82,593	65,22,556	...	65,22,556
Interest on Capital raised by Companies	1,74,68,954	...	1,74,68,954	1,80,73,955	...	1,80,73,955	1,88,06,943	...	1,88,06,943
Portion of annuities in purchase of railways representing interest on Capital	3,58,07,457	...	3,58,07,457	3,55,87,560	...	3,55,87,560	3,56,19,735	...	3,56,19,735
Interest on Capital of Guaranteed Companies	...	1,55,69,751	1,55,69,751	...	1,56,99,702	1,56,99,702	...	1,60,16,970	1,60,16,970
Total Interest	12,38,92,425	1,55,69,751	13,94,62,176	12,66,72,024	1,56,99,702	14,23,71,726	13,05,19,335	1,60,16,970	14,65,36,305
Surplus of net Revenue over Interest	1,42,45,375	—30,38,661	1,12,06,714	2,59,73,542	—31,47,365	2,28,26,177	3,79,53,353	—21,29,338	3,58,24,014
Portion of annuity payments representing redemption of Capital also charged against Revenue	91,65,078	...	91,65,078	94,64,955	...	94,64,955	95,01,790	...	95,01,790
Actual net gain +, or loss —	+50,80,297	—30,38,661	+20,41,636	+1,65,08,587	—31,47,365	+1,33,61,222	+2,84,51,573	—21,29,338	+2,63,22,234

11. As regards an account of the Capital liability in connection with railways owned by the State, there are some complications in stating the amount, owing to the fact that in the case of some of the lines taken over, the purchase price is being paid by means of annuities. In these cases, it seems correct to deduct from the original commuted Capital at which the lines were taken over, the amount redeemed by annuity payments up to date. On this basis the subjoined table shows the Capital liability at the end of 1904 on account of all railways classed as State railways; the State outlay, as recorded in rupees in the accounts being converted into sterling at the rate of Rs. 15=£1. The total Capital amounts to £241·57 millions (the details by railways being shown in Appendix 9); and on this the net revenues of the State railways for 1904, £11·23 millions, gives a return of 4·65 per cent. The total Capital of the two old Guaranteed railways amounts to £23·28 millions, as per details below, and on this the net earnings of these railways for 1904, £925·84 thousands, gives a return of 3·98 per cent.

Capital liability on account of railways classed as State railways at end of 1904.

	£	£
1. Share Capital of purchased railways being paid off by annuities :—		
Commuted value of stock purchased	85,010,259	
Deduct—		
Commuted Capital representing annuities which were purchased by creation of debt (liability included under item 3)	12,754,199	
New stock of the Great Indian Peninsula railway exchanged for portion of annuity (liability included under item 5)	1,750,000	
Capital redeemed by annuity payments ...	4,627,256	
	19,131,455	
Net outstanding		65,878,804
2. State outlay		88,565,060
3. Debt incurred for purchase of railways		34,335,069
4. Capital advanced by Government to Companies		13,983,331
5. Capital raised by Companies on the Secretary of State's guarantee (including overdrafts of Capital)		38,805,913
TOTAL CAPITAL LIABILITY		241,568,177

Capital liability on account of Guaranteed railways at end of 1904.

Capital raised on the Secretary of State's guarantee, including overdrafts :—

	£	£
Madras railway	12,352,354	
Bombay, Baroda and Central India railway ...	10,929,412	
		23,281,766

Principal events.

12. *Constitution of a Railway Board.*—As the outcome of a proposal made by Mr. Thomas Robertson, C.V.O., in his report on the working of Indian railways, His Majesty's Secretary of State for India sanctioned the formation of a Board, consisting of a Chairman and two members—with the necessary clerical establishment—to whom is entrusted the general control and administration of the railways in India, hitherto exercised by the Government of India in the Railway Branch of the Public Works Department.

Mr. F. R. Upcott, C.S.I., Government Director of Indian Railway Companies, has been appointed to the Chairmanship of the Board, and the two members are Mr. W. H. Wood, General Manager of the Hull and Barnsley railway, England, and Mr. T. R. Wynne, C.I.E., Agent and Chief Engineer, Bengal-Nagpur railway, with Mr. Neville Priestley, Secretary. These gentlemen assumed office in March 1905.

Measures for the comfort and convenience of 3rd class passengers.—This matter has received the special consideration of the Railway Board, who have drawn the attention of the several Railway Administrations to the urgent necessity for provision of—(1) facilities for passengers to obtain their tickets a longer time before the departure of the trains than they are at present able to do; (2) facilities for examining tickets of 3rd class passengers, both at starting and road-side stations, as will enable the passengers to have proper access to the platforms and take their seats in the train without the crush which now too frequently occurs; and (3) carriage accommodation for 3rd class passengers to prevent the over-crowding, which at present is much too general.

Purchases of railways.—Notice has been given to the Bengal Central Railway Company of termination, with effect from the 1st July 1905, of the Company's contract made with the Secretary of State for India on the 5th January 1887. The Bengal Central railway will, on purchase by the State, be merged in the Eastern Bengal State railway system.

The Sultanpur Branch on the Northern section of the Eastern Bengal State railway, metre gauge, 59 miles, was purchased from the Brahmaputra-Sultanpur Branch Railway Company. The 2′ 6″ gauge line from Aistala Ghat to Krishnagar, 20 miles, was also purchased from the Ranaghat-Krishnagar Light Railway Company. Both these lines have been incorporated with the Eastern Bengal State railway system.

Also the metre gauge line from Sagauli to Raxaul, 18 miles, was bought by Government from a company of that name. This was incorporated with the Tirhoot State railway.

During the year the East Indian railway started a separate Operating Department of their traffic management, under which the Commercial was separated from the Transportation work.

Through booking of passengers and luggage was established by the Ellerman line of steamers between the North Western State railway stations and the United Kingdom.

The Government of the United Provinces of Agra and Oudh made an "Order" for the construction and working by Messrs. Martin and Company of a tramway, on the 2′ 6″ gauge, from Shahdara to Saharanpur, with a branch from Baraut to Meerut.

A meeting of the Indian Railway Conference Association took place in Calcutta under the new "fundamental rules" which had been passed in the previous year by the Boards of Directors of the several Railway companies, at which several important matters were discussed.

During the year the Government of India, adopting the Secretary of State's recommendations, issued instructions for certain standard types of locomotives of both the 5′ 6″ and 3′ $3\frac{3}{8}$″ gauges.

Mr. Grant Burls, Director General of Stores at the India Office, who had been deputed to India in the autumn of 1903, as stated in the last report, made a general tour in the country. His suggestion as to standardizing the commercial types of metals, tools and other stores for use on State lines was discussed, and a standard list has been prepared for future use.

A Commission, appointed by the Government of India to enquire into the Luff Point coal loading scheme, reported that the depôt at Luff Point was not immediately necessary, but that if any auxiliary port was necessary, it should be established, and controlled by the Government through the Commissioners of the Port of Calcutta. This opinion was endorsed by the Lieutenant-Governor of Bengal.

The principal contracts entered into during the year were:

Between the East Indian railway and the Oudh and Rohilkhand State railway, giving running powers over a section of the latter.

An Indenture with the Madras Railway Company for the working and construction of the Azhikal-Mangalore State railway.

An Indenture with the Rohilkund and Kumaon Railway Company for the construction and working of the (i) Bareilly-Soron, (ii) Moradabad-Ramnagar, and (iii) Lalkua-Kashipur extensions of that line.

The Madras railway entered into a contract for the construction and working on behalf of the State of the Morappur-Dharmapuri and Tirupattur-Krishnagiri famine feeder railways.

The Madras and the Southern Mahratta Railway Companies entered into an agreement for the carriage of interchanged traffic.

The Wadhwan-Viramgam section of the Bombay, Baroda and Central India railway was converted back to the metre gauge, thus establishing connection on that gauge between the Bhavnagar-Gondal-Junagad-Porbandar railway and the Rajputana-Malwa railway, and an agreement was entered into for the transport of goods by the railway and sea route to Bombay, and by the all-rail route by the Bombay, Baroda and Central India railway.

Important works completed.

13. A new station building at Church Gate Street station on the *Bombay, Baroda and Central India railway.*

The *East Indian railway* transferred their carriage and wagon shops from Howrah to Lillooah. Large sheds were built on the river Hooghly, as well as a long bridge over the lines at Howrah, and a new junction station at Bandel.

On the *Great Indian Peninsula railway*, four new stations and the tunnels on the railway line at Agra in connection with the Balinganj goods depôt were finished.

The *Assam-Bengal railway* erected a second jetty at the Port of Chittagong.

The Borogh tunnel, 3,752 feet long, on the *Kalka-Simla railway*, was completed on the 15th May 1904. This is the second longest tunnel in India.

Accidents.

14. The following is a statement of accidents of all descriptions to persons which have occurred during the last five years :

Year.	Passengers.						Servants.						Other persons.												Total all classes.	
	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		Whilst passing over railways at level crossings.		Trespassers.		Suicides.		Miscellaneous, not included in preceding columns.		Total.			
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1900	14	85	83	258	97	343	21	84	236	384	257	468	4	8	28	9	698	236	164	8	17	35	911	296	1,265	1,107
1901	3	47	91	251	94	298	14	83	261	375	275	458	13	14	28	3	542	170	129	9	33	18	745	214	1,114	970
1902	127	184	98	289	225	473	37	95	269	364	306	459	13	13	16	3	542	162	108	5	21	23	700	209	1,231	1,141
1903	50	116	93	331	143	447	15	95	275	390	290	485	12	7	16	3	510	172	138	5	35	22	711	209	1,144	1,141
1904	11	88	105	321	116	404	23	103	250	364	273	467	6	15	23	1	577	186	120	2	41	14	767	218	1,156	1,089

There was an increase of 12 in the total number of persons killed from all descriptions of accidents during 1904 as compared with the previous year, but a decrease of 52 in the number injured.

The total number of persons of all classes killed by causes beyond their control, was 40 against 77 and the number injured 201 against 218. Out of a total of 227·10 millions against 210·23 millions of passengers travelling, and of 9,006·85 millions of miles against 8,389·91 millions of miles travelled, 11 passengers were

killed and 83 injured against 50 killed and 116 injured. This gives an average of one fatal casualty in 20·65 millions against one in 4·20 millions of persons travelling; and an average of one in 818·80 millions against one in 167·80 millions of miles travelled in 1904 and 1903 respectively.

15. The following are particulars of the more serious train accidents: —

No. 4 up Madras mail train was derailed near mile 88-15, between Contai Road and Narayangar stations, *Bengal-Nagpur railway*, on the 8th July 1904, due to the derailment of the seventh vehicle (Madras railway first class carriage No. A-31), owing to a slack in the line. One passenger was killed and fourteen injured. The rolling-stock and permanent-way were considerably damaged.

Nos. 35 up mail and 64 down goods trains collided at Machhpara station, *Eastern Bengal State railway*, on the 4th September 1904, due to the non-observance of shunting rules by the Assistant Station Master and to the driver of the mail train running against signals. Five passengers were killed and six injured. The engines and rolling-stock of both trains were considerably damaged.

No. 119 up light engine ran through Reti station, *North Western State railway*, without stopping or receiving line clear, and collided with No. 24 down passenger train at mile 407-10, between Reti and Dhandi stations, on the 3rd October 1904. Two railway servants were killed and two passengers and five railway servants injured.

No. 10 down passenger train collided with the engine of No. 13 up local train which was shunting and standing foul of the crossing of points, at Malakwal station, *North Western State railway*, on the 5th October 1904, due to the carelessness of the locomotive and traffic staff. Two passengers were killed and twelve injured. The rolling-stock was considerably damaged.

No. 120 down goods train, on the 29th November 1904, entered Pano Akil station, *North Western State railway*, at high speed and collided at the trailing points with No. 1-2 down goods train, which was leaving the station at the time, resulting in considerable damage to rolling-stock.

Damages by floods and rainfall.

16. The *Bengal-Nagpur railway* suffered in July near Kulunga station, where a bridge was scoured out.

Heavy rainfall in September near Madhi station, on the Tapti Valley branch of the *Bombay, Baroda and Central India railway*, caused a serious wash-out.

On the Cawnpore-Achnera branch of the Rajputana-Malwa section also, there was serious damage in June, July and August. Heavy rainfall rendered the embankment generally unsafe, but the delay to traffic was not great.

On the *Eastern Bengal State railway*, the Brahmaputra was flooded in August and the Jagannathgunj branch washed out in places.

The *East Indian railway* suffered serious damage in September near Delhi, where heavy rainfall damaged a length of line at Subzi Mundi station.

There was a wash-out near Papatapalli on the *Nizam's railway* in June; and in September, near Upalwai on the Godaveri line, there was a slip in a cutting of considerable extent.

Two remarkable accidents happened on the *North Western State railway* by the fall of large masses of rock, both in June, one near Basal and one near Mangi. Happily there was no accident to trains. There was also, in March, a landslip near Khushalgarh, and damage by rain between Jamrud and Peshawar.

There was heavy rainfall in the Cachar hills in April on the *Assam-Bengal railway* near Jatinga; the line suffered considerably and had to be constantly closed for days.

The floods in the Ganges river damaged, to a considerable extent, the *Bengal and North-Western railway* near Mansi in August. The Tirhoot section also suffered very seriously in June and July; the traffic being suspended in places for nearly six weeks.

The traffic on the Chalsa-Madarihat section of the *Bengal Dooars railway* was suspended for some six months, owing to damage by floods.

The *Bhavnagar-Gondal-Junagad-Porbandar railway* suffered in November from floods in the Madhwanti river, which scoured out a bridge.

On the Lashio branch of the *Burma railways* there were some slight detentions to traffic in June, August and occasionally up to December, but nothing very serious.

The *Kalka-Simla railway* escaped with one very slight interruption caused by rain in July.

Railway staff.

17. The total number in railway employ at the close of the year was 421,866, of which 6,293 were Europeans, 8,765 Eurasians and 406,808 Natives. Of the Europeans and Eurasians 12,808 were enrolled as volunteers.

18. The Police force employed for the maintenance of law and order on railways and for the protection of railway property, is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths, and the railways paying seven-tenths of the expense incurred.

19. Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of the Provident Fund and is required to subscribe monthly amounts varying on different railways but not exceeding 1-12th of his salary. At the close of the half-year, the railway distributes, as bonus among the depositors, a first contribution, equal to one-half of such subscriptions, and a second contribution, if the earnings permit of this being done, not exceeding one-half of such subscriptions, or one per cent. of net earnings.

20. The Fine Fund is used in the relief of families left in destitute circumstances, and to assist in keeping up schools, recreation clubs, and similar institutions.

21. On the larger railways, schools are provided and maintained at all centres where the number of children is sufficient to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government in the Educational Department, allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school, and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

The number attending railway schools amounted, at the close of 1904, to 7,777 children and 5,197 apprentices and workmen.

Railway surveys.

22. The following surveys were completed during 1904:—

Re-survey of a branch of the Jubbulpore-Gondia extension of the *Bengal-Nagpur railway*, from Nainpur to Mandla, 22 miles, on the 2′ 6″ gauge.

Lines (1) from Viramgam to Dhrangadra, 38 miles, with an extension to Malia, about 45 miles, on the 5′ 6″ gauge; (2) from Vijapur to Vadnagar, 17 miles, on the 3′ $3\frac{3}{8}$″ gauge; and (3) an extension of the Rajpipla State railway from Nandod station to Nandod town, 2 miles, on the 2′ 6″ gauge, all by the *Bombay, Baroda and Central India railway.*

Lines pertaining to the *Eastern Bengal State railway system* (1) from Sara to Serajganj near the right bank of the Brahmaputra river and beyond Serajganj to the river bank, about 50 miles, on the 5′ 6″ gauge; (2) reconnaissance of a line from Forbesganj to the Nepal frontier to serve Nepalganj, about 7 miles, on the 3′ $3\frac{3}{8}$″ gauge; and (3) location of a line from Katihar, *viâ* Malda, to Godagari, 105 miles, on the 3′ $3\frac{3}{8}$″ gauge,—the work on the alternative route, Raiganj to Malda, 42 miles, mentioned in the last Administration Report, having been stopped.

An extension by the *East Indian railway* through Azimganj to Barharwa station on the loop line, 99 miles, on the 5′ 6″ gauge, of the proposed branch lines from Burdwan to Katwa and Hooghly to Katwa.

By the *Great Indian Peninsula railway* a branch (1) of the Agra-Delhi Chord railway from Muttra Junction to Aligarh, *viâ* Brindaban, crossing the Jumna by a new bridge, 41 miles, with an alternative route utilising the existing bridge over the Jumna at Muttra, 38 miles; alternative routes of the Itarsi-Nagpur-Warangal railway project (2) from Shahpur to Peepla, 127 miles; (3) from Ghoradongra to Amla, 24 miles; and (4) from Bailona to Wardha, 65 miles, all to the east of existing alignments; branches off the Shahpur-Peepla alignment (5) from Hirdagarh to the Pench Valley coal-fields, 21 miles, and (6) from Saoli to Chhindwara, 15 miles, all on the 5′ 6″ gauge.

Final location of the extension of the *Nilgiri railway*, from Coonoor to Ootacamund, 12 miles, on the 3′ 3⅜″ gauge.

Final location survey on a new alignment from Nagda to Muttra, *viâ* Kotah, 344 miles, against 355 miles, *viâ* Baran, previously located, and, in addition, an alternative chord line, 100 miles, both on the 5′ 6″ gauge, *Nagda-Muttra railway*.

A branch line from Lodhran, on the Multan-Karachi section, to Mailsi, *North Western state railway*, 40 miles, on the 5′ 6″ gauge.

Re-survey and staking out of the Allahabad-Jaunpur line (Phaphamau to Zafarabad), *Oudh and Rohilkhand State railway*, 58 miles, on the 5′ 6″ gauge.

The Arakan railway, comprising sections (1) Prome river siding and ferry, 4 miles; (2) Sinde to Zadabin, 105 miles, and (3) Taungup river siding, 4 miles, a total of 113 miles, *Burma railway system*, all on the 3′ 3⅜″ gauge.

A branch line from Merta Road Junction to Merta City, *Jodhpur-Bikaner railway*, 9 miles, on the 3′ 3⅜″ gauge.

By the *South Indian railway*, lines (1) from Dindigul *viâ* Tirupnur to Satyamangalam, with branch from Puliyampatti to Mettupalaiyam, 137 miles; (2) from Palni *viâ* Pollachi to Palghat, with alternative from Pollachi to Podanur, 122 miles; and (3) from Tinnevelly to Tiruchendur, 38 miles, on the 3′ 3⅜″ gauge.

23. The following surveys are in progress:—

By the *Bengal-Nagpur railway*, a line from Purulia to Ranchi, 75 miles, on the 2′ 6″ gauge, and (2) a re-survey of the Gondia-Chanda railway, with a branch from Brahampuri to Nagpur, 205 miles, on the 2′ 6″ gauge.

By the *Bombay, Baroda and Central India railway*, lines (1) from Hansi to Jakhal on the North Western State railway, 49 miles, on the 3′ 3⅜″ gauge, and (2) from Bodeli terminus of the Gaekwar's Dabhoi railway to Barwaha station on the Rajputana-Malwa railway, 163 miles, on the 2′ 6″ gauge.

An extension of the Murshidabad branch, *Eastern Bengal State railway system*, from Lalgola to the mouth of the Bhagirathi river near Gherria, 16 miles on the 5′ 6″ gauge.

Final location of a line from Purbhani to Lattur (referred to in last year's report as the Purna-Latur railway), *Nizam's Guaranteed State railway system*, 72 miles, on the 3′ 3⅜″ gauge.

North Western State railway, lines (1) from Thal to Parachinar, 56 miles; and (2) from Chuharkana, *viâ* Mananwala, Nankana, Buchiana, Barala and Samundri, to Shorkot Road, 126 miles, both on the 5′ 6″ gauge.

By the *Rohilkund and Kumaon railway*, an extension of the Dudhwa branch of the Lucknow-Bareilly railway from Sonaripur to Ramnagar Ghat, 20 miles, on the 3′ 3⅜″ gauge.

An estimate has been prepared by the *Southern Mahratta railway* for the survey of a line from Miraj to Sangli, 4 miles, on the 3′ 3⅜″ gauge.

Brief notes on projects for new lines.

24. The concessions which were granted for the construction by private enterprise, on the 3′ 3⅜″ gauge, of the Kurnool branch railway (Madras), 32 miles,

the Bezwada-Masulipatam railway (Madras), 50 miles, the Guntur-Repalle line (Madras), 38 miles, and the Phirangipuram-Gurzala line (Madras), 51 miles, lapsed on the 30th April 1904, as the promoters failed to form a company and raise the requisite capital.

The Kistna District Board has since submitted proposals, through the Local Government, for financing the Bezwada-Masulipatam railway with the help of a special cess levied under the provisions of section 57 (ii) of the Madras Local Boards Act, 1884, supplemented by a loan from the Government of Madras under the Local Authorities Loan Act (XI of 1879). The proposals have been approved by the Government of India.

The scheme for the construction, on the 2′ 6″ gauge, of the Raichur-Wondalli railway (Hyderabad), 43 miles, the concession for which was granted to the Wondalli (Deccan) Gold Mines Company and the Hyderabad (Deccan) Company in June 1900, has not advanced any further.

A concession has been granted for the construction, on the 5′ 6″ gauge, by a company which is about to be formed, of the Amritsar-Patti railway (Punjab), about 27 miles, and the necessary preliminary agreement and contract will be executed shortly.

Negotiations which were stated in previous reports to have been proceeding for the construction, on the 2′ 6″ gauge, of the Kangra Valley railway (Punjab), 87 miles, have been terminated owing to the inability of the promoter to form a company.

The promoter of the Rawalpindi-Murree railway (Punjab), 48 miles, has been offered a concession for its construction on the 2′ 6″ gauge.

The consideration of the proposal, which was received in 1903, for the construction, on the 3′ 3⅜″ gauge, of a line from Sarai-Kala, *vid* Abbottabad, to the Kashmir frontier (North-West Frontier Province and Kashmir), 80 miles, is still before the Government of India.

Fresh proposals are being considered for the construction by private enterprise, of the following extensions, referred to in the last report, of the Dacca State railway :—

	Gauge.	Miles.
(*a*) Mymensingh, *vid* Netrokona, to Bara Ari, with a branch to Gauripur	3′ 3⅜″	37
(*b*) Singhjani, *vid* Sherpur, to Nalitabari	2′ 6″	25

The following projects which were also received during 1904, are under consideration :—

(*i*) A steam tramway on the 2′ 0″ gauge from Cawnpore to the left bank of the Jumna, opposite Hamirpur (United Provinces), 36 miles.

(*ii*) A 5′ 6″ gauge branch from Panchkura, on the Bengal-Nagpur railway, to Luff Point on the right bank of the Hooghly river (Bengal), 30 miles, and for making terminal and loading arrangements for ships or steamers at the latter place, subsequently rejected by the Government.

(*iii*) Extension of the Ahmedabad-Dholka railway from Dholka to Dhandhuka (Bombay), 40 miles.

(*iv*) A steam tramway from Dhandhuka to Ranpur (Bombay), 18 miles.

Proposals alternative to (*iii*) and (*iv*) have been put forward by the Bhavnagar-Gondal-Junagad-Porbandar railway administration for extending their 3′ 3⅜″ gauge railway from Ranpur to Dhandhuka and thence to Dholka.

The following projects were undecided on 31st December 1904 :—

(*a*) A tramway or light railway on the 2′ 0″ or 2′ 6″ gauge from Kamptee to Deolapar, with a branch from Munsar to Ramteck (Central Provinces), 35 miles.

(*b*) A light railway on the 2′ 6″ gauge, from Sirajganj to Ullapara (Bengal), 18 miles.

The scheme for the extension of the South Indian railway to Rameswaram, and for a canal and harbour in that island, was submitted to the Secretary of State. The railway only has been sanctioned.

The offer which in 1903 was made by the Government of India to advance a limited amount to Local Boards in the Madras Presidency through the Provincial Loan Account, for the construction of feeder railways, in cases where the Boards are unable to raise all the money required, was extended to all District Boards in India which levy a special cess for railway construction.

APPENDIX 1.

List of open lines of Railway at the close of the Calendar year 1904 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Number. Main head.	Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1904, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		A														
6	(b)	Agra-Delhi Chord	A. D.C.	Great Indian Peninsula Railway Company.	15-11-04	5′ 6″	...	119·51	...	...	...	...	...	...	...	
3	(g)	Ahmedabad-Dholka	A. D.	Bombay, Baroda and Central India Ry. Co.	23-2-03	3′ 3½″	...	...	...	33·50	...	...	...	...	...	Rebate lines.
3	(h)	Ahmedabad-Parantij.	A. P.		1-5-97	3′ 3½″	...	...	....	54·70	...	...	...	...	...	
12	(a)	Assam-Bengal	A. B.	Assam-Bengal Ry. Co.	1-7-95	3′ 3½″	...	740·38	...	...	...	...	...	...	...	
		B														
25	(a)	Barsi Light	B. L.	Barsi Light Ry. Co	1-3-97	2′ 6″	...	...	...	21·59	...	...	...	...	...	Government land provided free.
13	(a)	Bengal and North-Western.	B. & N.-W.	Bengal and North-Western Ry. Co.	2-4-84	3′ 3½″	...	...	...	870·80	...	...	...	...	...	
1	(a)	Bengal Central	B. C.	Bengal Central Ry. Co.	16-10-82	5′ 6″	...	127·69	...	...	...	...	...	...	...	This line is the property of the Bengal Central Railway Company but for convenience is classed as a State line.
14	(a)	Bengal Dooars	B. D.	Bengal Dooars Ry. Co.	15-1-03	3′ 3½″	...	...	...	36·40	...	...	...	...	...	Subsidized by District Board.
14	(b)	Bengal Dooars Extensions.	B. D. E.		20-4-00	3′ 3½″	...	...	...	116·56	...	...	...	...	...	Government land provided free.
2	(a)	Bengal-Nagpur	B. N.	Bengal-Nagpur Ry. Co.	1880	5′ 6″	...	1,695·67	...	...	...	...	...	...	...	
9	(b)	Beswada Extension	B. E.	Nizam's Guaranteed State Rys. Co.	10-2-89	5′ 6″	...	20·58	...	...	...	...	...	...	...	
15	(a)	Bhavnagar-Gondal-Junagad-Porbandar	B. G. J. P.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	20-12-80	3′ 3½″	...	...	...	...	...	334·19	...	...	...	Includes 5·23 miles of dock estate and quarry lines.
6	(c)	Bhopal-Itarsi (British section).	B. I.	Great Indian Peninsula Ry. Co.	1-6-62	5′ 6″	...	13·11	...	...	...	...	...	...	...	
		Bhopal-Itarsi (Native State section).			18-11-84	5′ 6″	...	...	...	...	...	...	44·28	...	...	
6	(d)	Bhopal-Ujjain	B. U.		11-11-95	5′ 6″	...	...	...	...	...	...	113·27	...	...	
19	(b)	Bikaner	J. B. B.	Jodhpur-Bikaner Ry.	9-12-91	3′ 3½″	...	...	...	...	...	245·55	...	...	...	
6	(e)	Bina-Goona-Baran.	B. G. B.	Great Indian Peninsula Ry. Co.	23-9-96	5′ 6″	...	...	...	...	...	...	145·63	...	...	
22	(b)	Birur-Shimoga	B. S. G.	Southern Mahratta Ry. Co.	1-12-99	3′ 3½″	...	...	...	...	...	...	37·92	...	...	
3	(a)	Bombay, Baroda and Central India.	B. B. & C. I.	Bombay, Baroda and Central India Ry. Co.	10-2-60	5′ 6″	...	...	504·35	...	...	...	...	...	...	Guaranteed under old contracts. Includes 39·23 miles of 3′ 3½″ gauge line between Viraungam and Wadhwan.
26	(a)	Bukhtiarpore-Behar Light.	B. B.	Bukhtiarpore-Behar Light Ry. Co.	1-7-03	2′ 6″	...	...	...	18·50	...	...	...	...	...	Subsidized by District Board.
16	(a)	Burma	B.	Burma Railways Co.	2-5-77	3′ 3½″	...	1,340·15	...	...	...	...	...	...	...	
		C														
11	(c)	Cawnpore-Barhwal (metre gauge link)	C. B. M.	Oudh and Rohilkhand State Ry.	24-11-96	3′ 3¾″	79·60	...	...	...	...	...	...	...	...	Excludes 3·40 miles of the Lucknow-Bareilly railway between Alahbagh and Dalibagh, worked over, but includes 16·79 miles of mixed (5′ 6″ and 3′ 3¾″ gauge line between Burhwal and Sara Banki and 0·89 mile on the Cawnpore Bridge of the Oudh and Rohilkhand State Railway.
4	(d)	Cooch Behar	C. B.	Eastern Bengal State Ry.	15-9-93	2′ 6″	...	...	...	...	...	...	...	33·60	...	
		D														
10	(h)	Dandot Light	D. L.	North Western State Ry.	5-7-89	2′ 0″	6·18	...	...	...	...	...	...	...	...	
36	(e)	Darjeeling-Himalayan.	D. H.	Darjeeling-Himalayan Ry. Co.	23-8-80	2′ 0″	...	...	...	51·00	...	...	...	...	...	Subsidized by the Local Government.
5	(b)	Delhi-Umballa-Kalka.	D. U. K.	East Indian Ry. Co.	1-3-91	5′ 6″	...	...	...	162·36	...	...	...	...	...	Subsidized by the Government of India.
17	(a)	Deoghur.	D.	Deoghur Ry. Co. ...	23-12-82	3′ 3½″	...	...	...	4·79	...	...	...	...	...	Government land provided free.
				Carried over			85·78	4,037·09	504·35	1,370·20	...	579·54	341·10	33·60	...	

APPENDIX 1—*contd.*

List of open lines of Railway at the close of the Calendar year 1904 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Number. Main head.	Number. Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1904, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
					Brought forward		85·78	4,057·09	504·35	1,370·20	...	579·54	341·10	33·60	...	
		D—*concld.*														
15	(b)	Dhrangadra	D.H.R.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	1-6-98	3′ 3⅜″	...	...	...	...	...	20·83	...	...	...	
18	(a)	Dibru-Sadiya	D. S.	Assam Railways and Trading Co.	Aug. 82	3′ 3½″	...	...	...	77·50	...	...	...	...	...	Subsidized by Local Government.
		E														
		Eastern Bengal State—														
		Dacca section			4-1-85	3′ 3⅜″	85·22	...	...	...	...	...	...	...	...	
		Northern, Behar and Kaumia-Dhubri sections.			28-8-77	3′ 3½″	551·68	...	...	...	...	...	...	...	...	
4	(b)	Ranaghat-Krishnagar and Teesta-Kurigram branches and British section, Sanirabari extension.	E. B. S. M.	Eastern Bengal State Ry.	18-7-81	2′ 6″	55·03	...	...	...	...	...	...	...	...	
4	(a)	Southern and Eastern sections.	E. B. S.		2-1-62	5′ 6″	278·08	...	...	...	...	...	...	...	...	
5	(a)	East Indian	E. I.	East Indian Ry. Co.	15-8-54	5′ 6″	...	1,932·87	...	..	...	...	...	...	...	
		G														
3	(m)	Gaekwar's Dabhoi	G. D.	Bombay, Baroda and Central India Ry. Co.	8-4-73	2′ 6″	...	...	...	...	...	...	94·49	...	...	
3	(f)	Gaekwar's Mehsana	G. M.		21-3-87	3′ 3½″	...	...	...	...	...	...	92·63	...	...	
3	(b)	Godhra-Rutlam-Nagda.	G. R. N.		16-1-93	5′ 6″	...	141·14	...	...	...	...	...	...	...	
6	(a)	Great Indian Peninsula.	G. I. P.	Great Indian Peninsula Ry. Co.	18-4-53	5′ 6″	...	1,561·63	...	...	...	...	...	...	...	
22	(c)	Guntakal-Mysore Frontier.	G. M. F.	Southern Mahratta Ry. Co.	1-3-92	3′ 3½″	...	119·60	...	...	...	...	...	...	...	
6	(g)	Gwalior Light	G. L.	Great Indian Peninsula Ry. Co.	2-12-99	2′ 0″	...	...	...	...	...	...	183·53	...	...	
		H														
11	(b)	Hardwar-Dehra	H. D.	Oudh and Rohilkhand State Ry.	1-3-00	5′ 6″	...	...	22·04	...	...	...	...	...	...	Guaranteed under modern contracts.
22	(d)	Hindupur (Yesvantpur-Mysore Frontier).	H.	Southern Mahratta Ry. Co.	15-12-92	3′ 3½″	...	...	...	...	...	...	51·35	...	...	
37	(e)	Howrah-Amta Light.	H. A.	Howrah-Amta Light Ry. Co.	1-7-97	2′ 0″	...	...	...	37·19	...	...	...	...	...	Subsidized by District Board.
38	(a)	HowrahSheakhala Light.	H. S.	Howrah-Sheakhala Light Ry. Co.	2-8-97	2′ 0″	...	...	...	19·75	...	...	...	...	...	
9	(c)	Hyderabad-Godavari-Valley.	H. G. V.	Nizam's Guaranteed State Rys. Co.	21-10-99	3′ 3½″	...	...	...	...	...	...	391·13	...	...	Includes 5·93 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Hyderabad and Secunderabad over which the Nizam's Guaranteed State railway trains also work.
		I														
6	(f)	Indian Midland	I. M.	Great Indian Peninsula Ry. Co.	10-1-78	5′ 6″	...	305·03	...	...	...	...	...	...	...	
					Carried over		1,057·09	8,617·26	536·39	1,504·64	...	600·37	1,164·23	33·60	...	

APPENDIX 1—*contd.*

List of open lines of Railway at the close of the Calendar year 1904 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Number. Main head.	Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1904, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		J			Brought	Forward	1,067·09	2,617·26	536·39	1,504·64	...	600·37	1,154·23	33·60	...	
10	(b)	Jammu and Kashmir (Native State section).	J. K.	North Western State Ry.	15-3-90	5′ 6″	...	...	...	...	...	...	...	15·99	...	The British section of this railway forms an integral portion of the North Western State railway.
15	(c)	Jamnagar . .	J. N.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	8-4-97	3′ 3½″	...	...	...	...	...	54·23	...	...	...	Includes 3·03 miles of dock estate lines.
15	(d)	Jetalsar-Rajkot .	J. R.		12-4-93	3′ 3½″	...	...	...	...	...	36·21	...	...	...	
19	(a)	Jodhpur . .	J. B.	Jodhpur-Bikaner .	24-6-62	5′ 3½″	...	...	...	...	...	454·94	...	...	...	
19	(c)	Jodhpur-Hyderabad (British section).	J. H.	Jodhpur-Bikaner Ry.	18-8-92	5′ 3½″	...	123·98	...	...	...	...	...	...	...	The Native State section of this railway forms an integral portion of the Jodhpur railway.
39	(a)	Jorhat . . .	J.	Jorhat Ry. . .	15-12-84	2′ 0″	30·25	...	...	...	...	...	...	...	...	
2	(b)	Jubbulpore-Gondia Extension.	J. G. E.	Bengal-Nagpur Ry. Co.	18-4-03	5′ 6″	...	213·77	...	...	...	...	...	...	...	
		K														
29	(c)	Kalka-Simla .	K. S.	Delhi-Umballa-Kalka Ry. Co.	9-11-03	2′ 6″	...	...	...	59·44	...	...	...	...	...	Government land provided free.
21	(b)	Karaikkal-Peralam	K. P.	South Indian Ry. Co.	14-3-98	3′ 3½″	...	...	...	...	...	...	...	...	14·65	
10	(f)	Khushalgarh-Kohat-Thal.	K. K. T.	North Western State Ry.	25-5-03	2′ 6″	21·73	...	...	...	...	...	...	...	...	
7	(b)	Kolar Gold-fields .	K. G.	Madras Ry. Co. .	1-6-04	5′ 6″	...	...	...	...	...	...	...	9·88	...	
23	(c)	Kolhapur . .	K. L.	Southern Mahratta Ry. Co.	21-4-91	3′ 3½″	...	...	...	...	...	...	...	29·27	...	
		L														
18	(b)	Ledo and Tikak-Margherita Collierry.	L. T.	Assam Railways and Trading Co.	17-3-84	3′ 3½″	...	...	...	...	6·50	...	...	...	...	
20	(b)	Lucknow-Bareilly .	L. B.	Rohilkund and Kumaon Ry. Co.	12-10-84	3′ 3½″	...	237·04	...	...	...	...	...	...	...	
10	(c)	Ludhiana-Dhuri-Jakhal.	L. D. J.	North Western State Ry.	10-4-01	5′ 6″	...	...	...	...	...	...	...	78·46	...	
		M														
7	(a)	Madras . .	M.	Madras Ry. Co. .	1-7-56	5′ 6″	...	...	904·01	...	...	...	...	...	...	Guaranteed under old contracts.
7	(c)	Madras (North-East line).	M. N.E.	Madras Ry. Co. .	30-3-92	5′ 6″	...	497·19	...	...	...	...	...	...	...	Includes 2·66 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bezwada and Kistna Block hut and 0·31 mile of 3′ 3½″ gauge line between Kistna Block hut and Tadepelli.
31	(c)	Morvi . . .	M.R.W.	Morvi Ry. . .	11-3-80	2′ 6″	...	...	...	...	...	94·36	...	...	...	
4	(c)	Mymensingh-Jamalpur-Jagannathganj.	M. J. J.	Eastern Bengal State Ry.	15-10-98	3′ 3½″	...	...	...	51·37	...	...	...	...	...	Rebate line.
22	(f)	Mysore-Nanjangud	M. N.	Southern Mahratta Ry. Co.	1-12-91	3′ 3½″	...	...	...	...	...	...	...	15·90	...	
23	(g)	Mysore Section (Southern Mahratta).	M. S.	Southern Mahratta Ry. Co.	1-3-81	3′ 3½″	...	296·22	...	...	...	...	...	...	...	
		N														
3	(c)	Nagda-Ujjain .	N. U.	Bombay, Baroda and Central India Ry. Co.	15-7-96	5′ 6″	...	...	...	...	...	...	...	34·23	...	
7	(d)	Nilgiri . . .	N.	Madras Ry. Co. .	15-6-99	3′ 3½″	...	16·99	...	...	...	...	...	...	...	
9	(a)	Nizam's Guaranteed State.	N. G. S.	Nizam's Guaranteed State Rys. Co.	9-10-74	5′ 6″	...	...	...	...	...	...	...	330·13	...	Includes 5·82 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Hyderabad and Secunderabad over which the Hyderabad Godavari Valley railway trains also work.
12	(b)	Noakhali (Bengal)	N. B.	Assam-Bengal Ry. Co.	15-5-03	3′ 3½″	...	...	...	34·90	...	...	...	...	...	Rebate line.
10	(a)	North Western State.	N. W.	North Western State Ry.	13-5-61	5′ 6″	2,185·56	...	...	...	...	...	...	...	...	Includes 5·83 miles of military lines not used for public traffic and 26·28 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bhatinda and Kot Kapura, over which the Rajputana-Malwa railway trains also work.
10	(g)	Nowshera-Durgai .	N. D.	North Western State Ry.	1-1-01	2′ 6″	40·25	...	...	...	...	...	...	...	...	
		O														
11	(a)	Oudh and Rohilkhand State.	O. & R.	Oudh and Rohilkhand State Ry.	23-4-67	5′ 6″	1,156·05	...	...	...	...	...	...	...	...	Includes 16·79 miles of mixed (5′ 6″ and 3′ 3½″) gauge line from Burhwal to Bara Banki and 0·69 mile on the Cawnpore Bridge and 1·81 miles of 3′ 3½″ gauge, between the Oudh and Rohilkhand State railway cantonment and the Bengal and North-Western railway city station at Benares.
					Carried	over .	5,562·93	10,002·45	1,440·40	1,650·35	6·50	1,250·10	1,573·63	128·25	14·65	

APPENDIX 1—*concld.*

List of open lines of Railway at the close of the Calendar year 1904 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Numbers. Main head.	Numbers. Sub-head.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1904, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		P			Brought forward.		5,562·93	10,002·45	1,440·40	1,650·35	8·50	1,250·10	1,573·63	128·25	14·65	
3	(*f*)	Palanpur-Deesa .	P. D.	Bombay, Baroda and Central India Ry. Co.	8-11-93	3′ 3½″	...	17·28	...	...	...	...	...	...	...	
2	(*c*)	Pariakimedi Light	P. L. L.	Bengal-Nagpur Ry. Co.	1-4-00	2′ 6″	...	...	...	...	...	...	24·62	...	...	
3	(*d*)	Petlad-Cambay (Anand-Tarapur section).	P. C. A.	Bombay, Baroda and Central India Ry. Co.	5-5-90	5′ 6″	...	...	...	...	...	...	21·50	...	...	
3	(*e*)	Petlad-Cambay (Tarapur-Cambay section).	P. C. T.		20-6-01	5′ 6″	...	...	...	...	...	...	10·92	...	...	
21	(*c*)	Pondicherry . .	P.	South Indian Ry. Co.	15-12-79	3′ 3½″	...	...	...	...	...	...	...	...	7·85	
20	(*c*)	Powayan Light .	P. W. L.	Rohilkund and Kumaon Ry. Co.	17-6-90	2′ 6″	...	...	...	39·50	...	...	...	...	...	Government land provided free.
		R														
2	(*d*)	Raipur-Dhamtari .	R. D.	Bengal-Nagpur Ry. Co.	10-9-00	2′ 6″	...	56·24	...	...	...	...	...	...	...	
3	(*a*)	Rajpipla . .	R.	Bombay, Baroda and Central India Ry. Co.	1-7-97	2′ 6″	...	...	...	...	...	...	37·37	...	...	
10	(*d*)	Rajpura-Bhatinda .	R. B.	North Western State Ry.	1-11-84	5′ 6″	...	...	...	...	...	...	...	107·05	...	
3	(*b*)	Rajputana-Malwa .	R. M.	Bombay, Baroda and Central India Ry. Co.	14-2-73	3′ 3½″	...	1,681·85	...	...	...	...	...	...	...	Includes 3·10 miles, 3·07 miles and 0·94 mile laid on the 5′ 6″ gauge at Ujjain, between Agra cantonment and Agra East Bank stations and from Lahori Gate cabin to Brewery cabin at Delhi, respectively, and 26·28 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bhatinda and Kot Kapura over which the North Western State railway trains also work.
20	(*a*)	Rohilkund and Kumaon.	R. & K.	Rohilkund and Kumaon Ry. Co.	19-10-84	3′ 3½″	...	...	...	53·93	...	...	...	...	...	Subsidized by the Government of India.
		S														
7	(*c*)	Shoranur-Cochin .	S. C.	Madras Ry. Co. .	2-6-02	3′ 3½″	...	...	...	...	...	...	64·75	...	...	
5	(*c*)	South Behar . .	S. B.	East Indian Ry. Co.	5-7-00	5′ 6″	...	...	...	78·76	...	...	...	...	...	Rebate line.
21	(*a*)	South Indian .	S. I.	South Indian Ry. Co.	15-7-61	3′ 3½″	...	1,123·13	...	...	...	...	...	...	...	
23	(*a*)	Southern Mahratta	S. M.	Southern Mahratta Ry. Co.	24-3-84	3′ 3½″	...	1,042·04	...	...	...	...	...	...	...	
10	(*c*)	Southern Punjab .	S. P.	North Western State Ry.	10-11-07	5′ 6″	...	...	...	425·33	...	...	...	...	...	Rebate line.
		T														
21	(*d*)	Tanjore District Board.	T. D. B.	South Indian Ry. Co.	2-4-04	3′ 3½″	...	...	...	99·46	...	...	...	...	...	
3	(*f*)	Tapti Valley .	T. V.	Bombay, Baroda and Central India Ry. Co.	1-12-98	5′ 6″	...	...	...	155·48	...	...	...	...	...	Rebate line.
33	(*a*)	Tarakeshwar-Magra Light.	B. P.	Bengal Provincial Light Ry. Co.	7-11-04	2′ 6″	...	...	...	...	33·27	...	...	...	...	
5	(*d*)	Tarkessur . .	T. .	East Indian Ry. Co.	1-1-85	5′ 6″	...	...	...	22·23	...	...	...	...	...	Government land provided free.
34	(*a*)	Tezpore-Balipara Light	T. B.	Tezpore-Balipara Light Ry. Co.	9-8-04	2′ 6″	...	...	...	20·10	...	...	...	...	...	Subsidized by District Board.
35	(*a*)	Thaton-Duyinzaik Light.	T. D.	Thaton-Duyinzaik Light Ry. Co.	11-2-85	2′ 6″	...	...	...	7·76	...	...	...	...	...	Subsidized by Local Government.
21	(*e*)	Tinnevelly-Quilon (Travancore) (British section).	T. Q. B.	South Indian Ry. Co.	1-6-02	3′ 3½″	...	50·40	...	...	...	...	...	...	...	
21	(*f*)	Tinnevelly-Quilon. (Travancore) (Native State section)	T. Q. N		1-8-03	3′ 3½″	...	...	...	...	...	...	57·98	...	...	
13	(*b*)	Tirhoot State .	T. S.	Bengal and North-Western Ry. Co.	1-11-75	3′ 3½″	...	534·98	...	...	...	...	...	...	...	
		U														
23	(*a*)	Udaipur-Chitor .	U. C.	Udaipur-Chitor Ry.	1-8-95	3′ 3½″	...	...	...	...	...	67·30	...	...	...	
		V														
3	(*l*)	Vijapur-Kalol-Kadi	V. K. K.	Bombay, Baroda and Central India Ry. Co.	10-6-02	3′ 3½″	...	...	...	...	...	...	41·37	...	...	
		W														
22	(*b*)	West of India Portuguese.	W. I. P.	Southern Mahratta Ry. Co.	17-1-87	3′ 3½″	...	...	...	...	...	...	...	...	51·10	
		Total mileage of railways open in India and Burma on the 31st December 1904.				5′ 6″	4,622·29	6,914·42	1,440·40	841·16	...	...	709·93	201·70	...	
						3′ 3½″	717·20	7,323·94	...	1,433·90	8·50	1,223·04	782·20	...	73·60	
						2′ 6″	187·01	270·01	...	166·89	33·27	94·36	156·48	33·60	...	
						2′ 0″	36·43	...	...	107·94	...	...	183·63	...	...	
						Total...	5,562·93	14,506·37	1,440·40	2,553·89	41·77	1,317·40	1,832·14	235·30	73·60	

APPENDIX 2.

Mileage added to the Railway System of India during the Calendar year 1904 and the four months following.

Number.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1904.	Date of opening for traffic.	Additions, in miles, made to open mileage during 1904.							
						Length.				Total mileage added to railway administration.			
Main head.	Sub-head.					5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″	5′ 6″	3′ 3⅜″	2′ 6″	2′ 0″
1	(a)	Bengal Central	Bengal Central	Dum Dum Cantonment to Pattipooker.	1st August 1904	2·63	...	...	...	2·63	...	...	...
				Aldih branch—									
				Mile 0 to mile 1·30 ...	12th February 1904.	1·30	...	...	...				
				Mile 1·30 to mile 1·55 ...	19th May 1904	0·25	...	...	...				
				Mile 1·55 to mile 2·35 ...	13th June 1904	1·00	...	...	...				
				Jamadhoda loop—									
				Mile 0 to mile 1·33 ...	16th September 1903.	1·33	...	...	...				
	(a)		Bengal-Nagpur.	Mile 1·33 to mile 2·28 ...	8th February 1904.	0·95	...	...	...				
				Mile 2·28 to mile 3·04 ...	7th May 1904	0·76	...	...	...				
				Mile 3·04 to mile 4·02 ...	21st September 1904.	0·98	...	...	...				
				Mile 4·02 to mile 5·50 ...	12th January 1901.	1·48	...	...	...				
2		Bengal Nagpur.		Bauria to Fort Gloster ...	12th February 1904.	2 00	...	...	...				
				Southern half of the Malkera-Katrasgarh cross connection.	24th August 1903.	0·71	...	...	...				
				Nainpur to Seoni ...	12th February 1904.	...	...	47·00	...				
	(b)		Jubbulpur-Gondia Extension.	Seoni to Chaurai ...	27th July 1904	...	...	19·25	...				
				Chaurai to Chhindwara ...	1st September 1904.	...	...	21·29	...				
				Nainpur to Burgi ...	5th July 1904	...	...	51·00	...	10·76	...	138·54	...
3	(k)	Bombay, Baroda and Central India.	Rajputana-Malwa.	Rewari to Narnaul ...	11th December 1904	...	32·55	...	...				
	(m)		Gaekwar's Dabhoi.	Mobha to Mosor Road (Kanjat))	1st November 1904.	....	...	6·49	...	...	32·55	6·49	...
6	(b)	Great Indian Peninsula.	Agra-Delhi Chord.	Raja Ki Mandi (Agra) to Kosi)	3rd December 1904.	56·89	...	...	...				
				Kosi to Delhi Sadr ...	15th November 1904.	62·62	...	...	...				
	(g)		Gwalior Light.	Gwalior to Jaora Alapur ...	1st January 1904.	...	...	...	31·34				
				Jaora Alapur to Sabalgarh	1st December 1904.	...	...	...	26·05	119·51	...	...	57·39
7	(a)	Madras ...	Madras ...	Cannanore to Ashikal ...	15th March 1904	4·10	...	...	...	4·10	...	...	...
10	(a)	North Western State.	North Western State.	Hyderabad to Badin ...	15th August 1904.	61·83	...	...	...	61·83	...	...	...
11	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Fyzabad to Sultanpur ...	1st February 1904.	35·50	...	...	...				
				Siwait to Phaphamau ...	20th January 1904.	3·27	...	...	...				
				Hapur to Meerut ...	24th October 1904.	18 09	...	...	...	56·86	...	...	...
13	(a)	Bengal and North-Western.	Bengal and North-Western.	Aunrihar to Jaunpur ...	21st March 1904	...	36·14	...	...				
				Kopaganj to Dhorighat ...	21st March 1904	...	21·70	...	...	...	57·84	...	...
16	(a)	Burma ...	Burma ...	Suburban lines at Bassein	15th January 1904.	...	3·18	...	...	...	3·18	...	...
	(e)		Tinnevelly Quilon (Travancore) (British section).	Portion of the British section near the frontier of the Travancore State.	26th November 1904.	...	0·90	...	...				
21	(f)	South Indian	Tinnevelly Quilon (Travancore) (Native State section).	Quilon to Punalur ...	1st June 1904	...	28·28	...	...				
				Punalur to the British Frontier near Shencottah.	26th November 1904.	...	29·27	...	...	...	58·45	...	...
33	(a)	Tarakeshwar-Magra Light	Tarakeshwar Magra Light.	Magra to Tribeni ...	14th April 1904	...	...	2·15	...	...	...	2·15	...
37	(a)	Howrah-Amta Light.	Howrah-Amta Light.	Jagatballabpur to Antpur...	1st June 1904	...	...	...	3·50	...	...	...	3·50
					Total mileage added during 1904 ...					255·74	152 02	147·18	65·89

APPENDIX 2—*concld.*

Mileage added to the Railway System of India during the Calendar year 1904 and the four months following.

Number.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1904.	Date of opening for traffic.	Additions, in miles, made to open mileage from 1st January to 30th April 1905.							
						Length.				Total mileage added to railway administration.			
Main head.	Sub-head.					5′ 6″	3′ 3½″	2′ 6″	2′ 0″	5′ 6″	3′ 3½″	2′ 6″	2′ 0″
				MILEAGE ADDED FROM THE 1ST JANUARY TO THE 31ST MARCH 1905.									
2	(f)	Bengal-Nagpur	Mohurbhanj ...	Rupsa to Baripada ...	20th January...	...	...	32·10	...	...	...	32·10	...
5	(a)	East Indian ...	East Indian ...	Shikohabad to Mainpuri ...	1st March ...	29·38	...	...	...	29·38	...	...	...
6	(b)	Great Indian Peninsula.	Agra Delhi Chord.	Delhi Sadr to Delhi Junction.	1st March ...	0·13	...	...	...				
	(f)		Indian Midland	Agra Road to Raja Ki Mandi.	1st March ...	2·10	...	...	...	2·53	...	...	...
11	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Allahabad to Phaphamau...	1st January ...	7·00	...	...	...	7·00	...	...	...
13	(a)	Bengal and North-Western.	Bengal and North-Western.	Uska Bazar to Barhni (Bahadurganj).	5th January ...	...	31·00	...	...				
	(b)		Tirhoot ...	Sakri to Jaynagar ...	14th January...	...	30·47	...	...	...	61·47	...	...
19	(a)	Jodhpur-Bikaner.	Jodhpur ...	Merta Road to Merta City	18th January...	...	8·95	...	...	...	8·95	...	...
24	(a)	Barasat-Basirhat Light.	Barasat-Basirhat Light.	Barasat to Basirhat ...	1st February...	...	...	26·06	...	...	...	26·06	...
31	(a)	Morvi ...	Morvi ...	Wadhwan to Than Road ...	3rd March ...	...	30·00	...	...	...	30·00	...	...
				Total mileage added from 1st January to 31st March 1905 ...						38·91	100·42	58·16	...
				MILEAGE ADDED FROM 1ST TO 30TH APRIL 1905.									
2	(b)	Bengal-Nagpur	Jubbulpore Gondia Extension.	Burgi to Howbagh Jabalpur.	7th April ...	...	...	16·16	...	...	...	16·16	...
4	(a)	Eastern Bengal State.	Eastern Bengal State.	Ranaghat to Jinganj ...	15th April ...	81·00	...	...	...	81·00	...	...	...
22	(j)	Southern Mahratta.	Hospet-Kottur	Hospet to Kottur ...	1st April ...	...	44·10	...	...	...	44·10	...	...
				Total mileage added from 1st to 30th April 1905 ...						81·00	44·10	16·16	...
				GRAND TOTAL MILEAGE OPEN ON THE 30TH APRIL 1905 ...						14,852·81	11,706·90	1,015·94	327·90

APPENDIX 3.

Total Railway mileage opened for traffic during, and at the end of each year, and the total mileage opened during the Viceroyalty of each Governor General.

Calendar year.	Net mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroys.
1853	20	20	169	Marquis of Dalhousie.
1854	51	71		
1855	98	169		
1856	103	272	1,418	Earl Canning.
1857	15	287		
1858	140	427		
1859	198	625		
1860	213	838		
1861	749	1,587		
1862	746	2,333	920	Earl of Elgin.
1863	174	2,507		
1864	451	2,958	1,501	Lord Lawrence.
1865	405	3,363		
1866	200	3,563		
1867	366	3,929		
1868	79	4,008		
1869	247	4,255	1,066	Earl of Mayo.
1870	516	4,771		
1871	303	5,074		
1872	295	5,369	1,467	Lord Northbrook.
1873	328	5,697		
1874	529	6,226		
1875	315	6,541		
1876	319	6,860	2,621	Lord Lytton.
1877	460	7,320		
1878	899	8,219		
1879	275	8,494		
1880	668	9,116		
1881	728	9,890	2,469	Marquis of Ripon.
1882	259	10,149		
1883	309	10,458		
1884	1,173	11,631		
1885	652	12,283	2,945	Earl of Dufferin and Ava.
1886	609	12,892		
1887	1,211	14,103		
1888	473	14,576		
1889	1,311	15,887	3,928	Marquis of Lansdowne.
1890	514	16,401		
1891	907	17,308		
1892	507	17,815		
1893	689	18,504		
1894	396	18,900	3,536	Earl of Elgin.
1895	647	19,547		
1896	707	20,254		
1897	861	21,115		
1898	925	22,040		
1899	1,483	23,523	5,525	Lord Curzon.
1900	1,229	24,752		
1901	611	25,363		
1902	568	25,931		
1903	1,025	26,956		
1904	609	27,565		

APPEN

Capital authorized to be raised for each Guaranteed railway, State line leased to companies, and rail 31st Decem

Numbers.		Railways.	Amount authorized to be raised by the Companies up to the 31st December 1904.				Amount raised by the Companies and tary of State in England to the		
							Share Capital.		*Debentures.*
Main head.	Sub-head.		Share Capital.	Debentures.	Debenture stock.	Total.	Rate of interest per cent.	Amount.	Cash received.
		Guaranteed.	£	£	£	£		£	£
3	(a)	Bombay, Baroda and Central India	7,550,300	2,927,400	...	10,477,700	5	7,528,628	2,926,125
7	(a)	Madras	10,257,630	2,015,800	...	12,273,430	5 4½ 4½	8,757,670 269,960 500,000	2,012,738
		Total	17,807,930	4,943,200	...	22,751,130	...	17,786,258	4,938,863
		State lines leased to Companies.							
1	(a)	Bengal Central	500,000	...	...	500,000	3½	500,000	...
2	(a) (b) & (d)	Bengal-Nagpur	3,000,000	1,800,000	...	4,800,000	4	3,000,000	1,793,516
		Do. Extensions	...	3,105,000	...	3,105,000	...	...	3,099,812
6	(f)	Indian Midland	3,000,000	3,654,100	...	6,654,100	4	3,000,000	3,646,994
12	(a)	Assam-Bengal	1,500,000	1,355,900	...	2,855,900	3	1,500,000	1,353,650
16	(a)	Burma	2,000,000	...	1,250,000	3,250,000	2½	2,000,000	...
20	(b)	Lucknow-Bareilly section (Rohilkund and Kumaon)	...	147,000	...	147,000	...	...	160,837
22	(a)	Southern Mahratta	3,500,000	1,193,100	...	4,693,100	3½	3,491,540	1,192,350
22	(g)	Mysore section (Southern Mahratta)	...	...	1,200,000	1,200,000	...	...	...
		Total	13,500,000	11,255,100	2,450,000	27,205,100	...	13,491,540	11,247,159
		Branch lines.							
3	(g)	Ahmedabad-Dholka	86,667	...	...	86,667	...	...	...
3	(h)	Ahmedabad-Parantij	133,333	...	...	133,333	...	...	...
11	(b)	Hardwar-Dehra	200,000	...	...	200,000	...	...	...
4	(c)	Mymensingh-Jamalpur-Jagannathganj	147,889	...	...	147,889	...	...	...
5	(c)	South Behar	400,000	...	290,000	690,000	...	379,580	...
3	(f)	Tapti Valley	993,333	...	40,000	1,033,333	...	...	...
		Total	1,961,222	...	330,000	2,291,222	...	379,580	...
		Grand total	33,269,152	16,198,300	2,780,000	52,247,452	...	31,657,378	16,186,022

Details of Debenture loans on 31st December 1904 and the dates at which the loans expire.

Bombay, Baroda and Central India Railway—

£		
120,000	3½ per cent.	1st February 1905.
100,700	3 „ „	8th July 1905.
536,000	3 „ „	1st December 1905.
149,400	3½ „ „	15th June 1906.
180,000	3½ „ „	10th July 1906.
100,500	3½ „ „	8th January 1907.
320,000	3½ „ „	10th January 1907.
500,000	3½ „ „	30th June 1907.
67,000	3½ „ „	1st April 1908.
198,800	3½ „ „	8th July 1908.
300,000	3½ „ „	7th November 1908.
300,000	3½ „ „	1st January 1909.
55,000	3½ „ „	5th May 1910.
2,927,400		

Madras Railway—

£		
100,000	3 per cent.	1st December 1905.
111,500	3 „ „	30th June 1906.
140,000	3½ „ „	30th June 1906.
145,000	3½ „ „	31st December 1906.
100,000	3½ „ „	30th April 1907.
54,200	3½ „ „	30th June 1907.
200,000	3½ „ „	31st October 1907.
81,400	3½ „ „	31st December 1907.
53,300	3½ „ „	31st December 1907.
174,400	3½ „ „	30th June 1909.
63,300	3½ „ „	30th June 1910.
500,000	3½ „ „	19th May 1911.
293,700	3½ „ „	30th June 1911.
2,015,800		

DIX 5.

way constructed under the "Branch line" terms, the amount raised and the amount withdrawn to ber 1904.

ADVANCED BY THE SECRE- 31st DECEMBER 1904.			AMOUNT RAISED IN INDIA TO THE 31st DECEMBER 1904.			Total amount raised to the 31st December 1904.	TOTAL AMOUNT WITH- DRAWN TO THE 31st DECEMBER 1904.		REMARKS.
Debenture stock. Cash received.	Capital not bearing interest (premium).	Advances made to companies from money raised under Act 61, Vict., Cap. 5.	Share Capital.	Debenture stock.	Capital not bearing interest (premium).		During calendar year 1904.	Up to the close of calendar year 1904.	
£	£	£	£	£	£	£	£	£	
...	28,766	400,000	21,672	...	...	10,905,191	50,442	10,956,903	
...	8,524	...	...	...	...	12,278,892	69,203	12,357,816	
...	37,290	400,000	21,672	...	...	23,184,083	119,645	23,314,719	
...	...	500,000	...	...	...	1,000,000	—2,398	1,015,861	
...	8,150	2,760,000	...	...	...	7,561,666	67,558	7,926,748	
...	9,450	...	...	...	...	3,109,262	710,375	8,277,421	
...	—5,977	1,495,000	...	...	...	8,136,017	155,965	8,664,621	
...	15,335	...	...	...	...	2,869,035	...	2,869,035	
1,199,819	...	...	...	...	...	3,199,819	220,068	3,523,415	
...	—735	...	...	...	...	160,102	14,173	464,782	
...	30,923	2,129,900	8,460	...	34	6,853,207	23,561	6,791,181	
1,200,000	24,000	...	...	...	...	1,224,000	1,859	1,214,810	
2,399,819	81,196	6,884,900	8,460	...	34	34,113,108	1,191,661	40,747,824	
...	...	...	73,275	...	...	73,275	1,008	67,920	
...	...	...	130,000	...	2,667	132,667	12	132,603	
...	...	...	194,867	...	...	194,867	4,564	194,200	
...	...	...	157,696	...	...	157,706	1,480	156,741	
290,000	15,000	...	...	...	...	684,580	—1,932	735,054	
...	...	...	833,334	39,203	17	872,554	4,975	871,802	
290,000	15,000	...	1,389,172	39,203	2,684	2,115,649	10,107	2,158,220	
2,689,819	133,486	7,284,900	1,419,304	39,203	2,718	59,412,840	1,321,413	66,220,763	

Bengal-Nagpur Railway—

£		
400,000	3 per cent.	18th August 1905.
400,000	3 „ „	15th June 1906.
109,300	3½ „ „	10th July 1906.
390,700	3½ „ „	10th January 1907.
448,900	3½ „ „	18th February 1907.
155,000	3½ „ „	3rd January 1908.
400,000	3½ „ „	4th May 1908.
265,600	3½ „ „	18th February 1909.
400,000	3½ „ „	21st April 1909.
750,000	3½ „ „	1st June 1909.
785,500	3½ „ „	18th February 1910.
400,000	3½ „ „	5th May 1911.
4,905,000		

Indian Midland Railway—

£		
150,000	3 per cent.	30th June 1905.
582,900	3½ „ „	30th June 1906.
390,000	3½ „ „	31st December 1906.
610,000	3½ „ „	30th June 1907.
421,200	3½ „ „	31st December 1907.
500,000	3½ „ „	3rd October 1908.
257,500	3½ „ „	30th June 1910.
742,500	3½ „ „	30th June 1911.
3,654,100		

Southern Mahratta Railway—

£		
88,100	3 per cent.	1st October 1905.
600,000	3 „ „	1st April 1906.
50,000	3½ „ „	1st October 1907.
160,000	3½ „ „	1st April 1908.
255,000	3½ „ „	1st October 1908.
100,000	3¾ „ „	31st May 1909.
1,193,100		

Lucknow-Bareilly Railway—

£		
32,000	3½ per cent.	1st July 1910.
115,000	3¾ „	1st July 1911.
147,000		

Assam-Bengal Railway—

£		
300,000	2½ per cent.	13th April 1905.
560,000	3½ „ „	4th July 1907.
495,900	3½ „ „	4th July 1909.
1,355,900		

Capital expenditure in thousands of rupees

Number.	Railways (including branches worked).	EXPENDITURE ON NEW LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.									
		YEARS.									
		1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
1	Bengal Central	...	...	...	...	...	...	...	...	...	...
2 (a) to (d) and (f).	Bengal-Nagpur	1,36	62,32	1,71,88	1,71,20	1,67,01	79,14	40,25	1,42,51	1,17,84	1,02,23
3 (a) to (f) & (ee) & (n).	Bombay, Baroda and Central India	6,03	18,76	16,82	49,86	60,95	24,05	13,72	9,76	23,43	7,56
4	Eastern Bengal State	18	4	3,00	13,89	29,15	31,10	40,07	35,32	30,88	38,18
5	East Indian	11,96	18,06	30,80	1,07,94	68,09	39,09	33,15	28,67	48,89	91,17
6	Great Indian Peninsula	65,36	27,30	65,88	80,87	67,71	18,77	2,19	4,12	26,43	68,49
7 (a) to (f) & (h) & (i).	Madras	...	24,41	10,91	7,47	11,38	20,90	54,50	39,56	60,42	37,51
8	Nagda-Muttra (Southern Section)	...	...	...	...	...	...	...	...	...	1,75
9	Nizam's Guaranteed State	...	...	15,32	40,79	78,37	37,06	...	...	...	...
10 (a) to (h)	North Western State	1,15,54	2,13,51	1,26,36	62,24	41,82	41,48	54,63	49,91	30,87	1,21,56
11	Oudh and Rohilkhand State	15,14	23,03	39,38	23,72	39,27	27,17	9,30	20,61	54,52	30,78
12	Assam-Bengal	1,39,34	1,11,06	1,09,69	1,35,82	1,05,81	97,65	88,10	71,84	45,68	13,59
13	Bengal and North-Western	21,09	32,03	1,04,74	62,86	70,90	28,89	30,86	26,15	12,63	46,76
14	Bengal Docars	...	...	72	1,86	7,98	18,19	15,61	15,56	8,50	...
15	Bhavnagar-Gondal-Junagad-Porbandar	16	9,24	9,30	5,42	...	...	...	...	...	...
16	Burma	67,44	43,40	39,67	49,29	62,52	50,63	56,42	35,77	...	3,89
17	Deoghur	...	...	...	...	...	...	...	...	...	...
18	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...
19	Jodhpur-Bikaner	...	23	10,04	26,40	4,86	6,61	4,00	6,77	...	89
3 (g) to (l) & (o).	Rajputana-Malwa	14,22	18,44	12,09	8,58	2,67	59	21	1,07	5,63	35,80
20	Rohilkund and Kumaon	96	4	...	...	...	...	3	43	83	9,74
21	South Indian	1,00	53	5,19	—21,05	2,70	14,00	36,50	73,39	56,12	27,81
22	Southern Mahratta	...	...	...	...	...	...	...	...	2,56	12,60
23	Udaipur-Chitor	10,26	18	26	1,13	2,16	45	21	...	...	...
24	Barasat-Basirhat Light	...	...	...	...	...	...	...	...	...	5,69
25	Barsi Light	...	...	...	...	...	...	...	...	...	23
26	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	5,30	...
27	Cutch	...	...	...	...	...	...	...	...	92	1,35
28	Dwara-Therria Light	...	...	...	...	...	...	...	...	8,24	1,39
29	Kalka-Simla	...	...	...	...	3,39	4,51	23,53	49,99	50,99	21,40
31	Morvi	...	...	...	...	...	2,32	11	3	85	*6,24
	Ranaghat-Krishnagar Light	...	...	1,01	5,01	5	...	...	...	...	†
33	Tarakeshwar-Magra Light	...	...	...	...	...	...	...	...	16	...
34	Tarpore-Balipara Light	62	...	...	...	...	...	...	...	...	...
36	Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...
37	Howrah-Amta Light	...	3,62	4,01	29	5	1	3	...	20	2,79
38	Howrah-Sheakhala Light	...	1,31	2,31	33	...	...	...	...	...	...
39	Jorhat	...	...	...	...	...	...	...	...	...	...
40	Matheran Light	...	...	...	...	...	...	...	...	...	67
	TOTAL	4,70,66	6,07,51	8,30,33	8,27,96	8,26,84	5,42,51	5,03,52	6,11,46	5,91,89	6,89,57

DIX 7.

during each of the past 10 years.

EXPENDITURE ON ROLLING STOCK IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.										
YEARS.										REMARKS.
1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	
...	...	11,59	4,37	1,95	27	3	4	15	...	
2,15	2,26	32	1,13	33,92	27,35	4,29	57,16	34,13	40,84	
6,94	2,08	24	6,00	13,84	13,34	4,24	2,51	7,97	3,26	
8,26	7,30	16,63	10,52	13,21	4,57	13,01	13,12	35,25	15,25	
26,91	12,02	27,27	36,32	1,06,52	64,34	73,57	54,29	17,91	26,96	
2,68	2,40	7,85	1,63	8,27	13,36	21,27	12,27	31,84	37,89	
33	1,65	6,57	1,47	3,66	3,26	10,11	25,43	16,44	6,24	
...	...	...	...	...	...	...	...	...	...	
27	2,22	49	3,06	12,80	12,67	1,51	5,86	3,05	72	
2,08	10,63	36,32	21,85	5,70	79	12,30	22,21	14,34	13,91	
3,06	59	3,51	7,06	5,68	79	5,85	17,93	23,91	7,58	
17,52	16,29	4,25	2,65	1,63	87	3,05	7,69	9,86	6,32	
9,03	2,25	9,98	24,03	15,84	18,58	18,47	12,49	18,33	3,48	
1	1	52	1	4,09	2,32	1,40	7	25	5	
2	1,80	87	1,24	8	16	80	35	55	*—1,05*	
9,93	8,80	1,50	6,36	11,96	4,74	20,35	26,60	19,57	12,20	
...	...	...	...	...	...	...	...	...	...	
1,06	78	14	20	16	2,52	1,13	...	9	4,47	
—11	39	...	6,08	14,14	22	2,22	1,95	4,22	1,36	
1,12	2,15	*—12*	*—1,59*	3,07	1,83	89	3,70	3,19	3,35	
33	18	2	2,42	1,02	3,39	2,06	6,86	6,11	1,33	
87	29	1,22	43	73	26	*—3*	1,46	2,96	1,27	
37	45	1,40	5,34	3,42	1,44	1,88	26	35	35	
...	...	2,25	5	...	...	42	...	...	...	
...	...	...	...	...	...	...	...	...	2,05	
...	2,49	1,77	27	...	...	*—39*	...	...	...	
...	...	...	...	...	...	...	...	2,17	23	
...	...	...	...	...	...	...	...	13	13	
...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1,07	3,93	2,35	* Represents expenditure on conversion of the existing line from 2' 6" to metre gauge.
—10	24	2	12	4	6	10	*—12*	*—22*	...	
...	...	...	1,20	...	24	...	...	...	†	†Purchased by the State from the 1st July 1904 and incorporated with the Eastern Bengal State Railway.
...	...	...	1	18	...	...	...	1	1	
27	18	...	6	12	...	...	...	...	...	
1	24	2	*—25*	54	*—16*	1	9	41	70	
...	1,08	1,26	99	11	46	...	72	...	30	
...	...	1,17	48	...	...	...	...	3	...	
6	*—7*	38	20	...	...	*—31*	4	12	2	
...	...	...	...	...	...	...	...	...	...	
98,07	78,70	1,37,44	1,43,71	2,67,68	1,77,67	1,98,73	2,84,05	2,62,54	1,92,38	

APPEN

Capital expenditure in thousands of rupees

Number.	Railways (including branches worked).	EXPENDITURE ON IMPROVEMENT OF EXISTING LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.									
		YEARS.									
		1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
1	Bengal Central	34	69	86	2,15	75	1,66	1,18	1,15	73	43
2 (*a*) to (*d*) & (*f*).	Bengal-Nagpur	3,15	10,08	3,56	57	25	1,68	3,37	1,61	3,58	5,66
3 (*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India	16,10	23,86	28,88	15,33	36,60	8,42	21,74	9,89	5,71	4,83
4	Eastern Bengal State	5,91	18,06	27,03	7,64	8,72	13,85	11,37	15,43	23,86	49,13
5	East Indian	14,38	15,75	19,82	28,96	40,78	48,92	64,24	58,69	41,88	46,44
6	Great Indian Peninsula	9,99	6,09	4,37	8,04	6,75	10,28	11,65	17,04	23,56	64,79
7 (*a*) to (*f*) (*h*) & (*i*).	Madras	3,66	4,07	3,30	3,16	2,43	3,93	9,33	4,56	5,91	14,26
8	Nagda-Muttra (Southern Section)	...	...	...	...	...	...	...	...	...	...
9	Nizam's Guaranteed State	1,79	82	3,15	1,24	*—1,05*	2,78	6,53	8,14	3,76	2,97
10 (*a*) to (*h*)	North Western State	29,48	30,47	28,30	18,92	20,58	19,10	14,67	48,44	22,42	30,94
11	Oudh and Rohilkhand State	7,09	2,61	4,01	4,38	9,74	8,30	9,45	12,75	12,40	19,80
12	Assam-Bengal	...	...	...	...	...	...	...	...	...	...
13	Bengal and North-Western	1,53	49	2,86	5,05	6,63	12,21	7,19	25,66	21,79	29,04
14	Bengal Dooars	49	84	1,08	53	38	16	2	5	21	5,55
15	Bhavnagar-Gondal-Junagad Porbandar	2,66	1,03	73	2,10	91	31	16	40	3	3
16	Burma	7,66	17,27	6,24	5,09	11,31	25,14	22,05	7,91	20,35	21,11
17	Deoghur	1	...	...	1	*—1*	...	...	...	...	...
18	Dibru-Sadiya	21	*—25*	2,41	7	...	6	7,20	23	32	22
19	Jodhpur-Bikaner	*—4*	13	7	6,25	*—81*	*—1,58*	3,16	3,77	62	56
8 (*g*) to (*l*) & (*o*).	Rajputana-Malwa	5,04	5,14	2,85	3,32	3,98	3,53	8,20	13,38	9,48	8,62
20	Rohilkund and Kumaon	59	2,56	1,71	79	21	1,15	1,02	66	1,59	1,56
21	South Indian	92	1,01	76	1,52	3,59	3,03	3,83	1,46	3,40	6,64
22	Southern Mahratta	7,63	4,01	5,60	6,29	7,50	5,79	4,59	3,29	2,98	2,26
23	Udaipur-Chitor	...	...	...	...	...	...	19	4	1	...
24	Baraset-Basirhat Light	...	...	...	...	...	...	...	...	...	...
25	Barsi Light	...	...	...	...	...	...	...	7	...	...
26	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	39
27	Cutch	...	...	...	...	...	...	...	...	...	...
28	Dwara-Therria Light	...	...	...	...	...	...	...	...	...	...
29	Kalka-Simla	...	...	...	...	...	...	...	...	...	...
31	Morvi	1,37	10	49	7	5	*—16*	1	...	...	*—1*
	Banaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...
33	Tarakeshwar-Magra Light	...	...	...	1	1	...	2	5	6	3
34	Tezpore-Balipara Light	...	9	3	1	5	13	...	...	...	...
36	Darjeeling-Himalayan	20	42	38	49	25	10	21	12	31	4
37	Howrah-Amta Light	...	...	...	...	...	...	...	...	...	14
38	Howrah-Sheakhala Light	...	...	...	...	...	...	...	...	2	...
39	Jorhat	3	10	...	...	4	...	17	3	...	...
40	Matheran Light	...	...	...	...	...	...	...	...	...	...
	TOTAL	1,20,15	1,45,44	1,48,49	1,22,09	1,59,64	1,68,79	2,11,55	2,35,35	2,04,98	3,15,43

DIX 7—*concluded.*

during each of the past 10 years.

TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES *INCLUDING* VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.										
YEARS.										REMARKS.
1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	
38	4,59	10,29	6,90	3,04	34	2,58	1,58	76	*—36*	
6,19	1,16,54	1,99,28	1,62,45	1,98,87	75,84	77,61	1,76,45	1,94,63	1,19,88	
26,16	54,14	58,06	89,09	98,82	28,58	56,65	29,50	19,61	9,62	
14,62	27,24	51,23	35,51	56,49	49,25	66,77	81,52	1,19,34	1,09,61	
62,80	70,12	1,42,83	1,66,97	2,18,13	1,62,49	1,41,12	1,45,82	1,39,68	1,45,03	
74,39	* 51,02	71,81	79,51	78,98	53,32	44,54	23,58	1,16,21	1,75,86	
4,39	27,45	19,63	12,65	19,27	55,11	63,58	60,36	86,09	72,11	
...	...	...	...	...	...	...	...	...	1,73	
4,15	1,85	18,30	60,32	96,90	32,24	18,40	15,84	5,73	5,26	
1,72,05	2,63,14	1,66,19	82,47	66,46	83,47	93,87	1,30,10	69,58	3,09,09	
35,29	20,23	44,90	33,16	55,69	39,26	32,76	76,47	87,45	53,06	
1,57,49	1,17,01	1,16,28	1,18,74	1,13,15	86,46	85,47	69,86	53,24	19,81	
45,34	35,46	1,68,40	79,06	70,13	55,94	48,78	63,47	53,92	79,28	
42	1,07	2,17	4,25	22,26	19,77	15,23	10,45	7,09	5,35	
2,83	14,18	8,67	8,95	92	17	96	44	67	*—1,40*	
74,82	82,48	50,87	51,62	86,24	92,79	95,26	71,01	31,08	36,97	
1	...	...	1	*—1*	....	...	*—9*	...	...	
1,28	53	2,55	27	17	2,57	3,32	1,78	41	4,69	
—15	48	10,12	39,36	13,04	4,89	19,78	6,64	*—57*	221	
34,23	11,46	*—2,93*	9,43	10,59	17,19	12,74	22,33	30,53	43,74	
2,50	2,61	3,79	2,10	13	5,37	4,34	12,92	4,60	19,79	
5,25	*—14*	4,59	*—19,88*	7,30	17,47	47,40	99,17	52,83	31,08	
7,31	6,59	8,19	11,05	3,74	8,15	4,83	1,22	24,96	34,22	
10,26	18	2,51	1,18	2,16	45	82	4	1	...	
...	...	...	...	...	...	...	...	...	7,78	
...	2,49	1,77	27	...	...	*—89*	19	...	26	
...	...	...	...	...	...	...	...	7,48	62	
...	...	...	...	...	...	...	...	1,04	1,48	
...	...	...	...	...	...	...	...	8,24	1,39	
...	...	...	...	5,81	6,10	22,96	57,95	48,51	26,93	
1,76	*—17*	94	3	27	2,22	31	*—26*	56	6,18	
...	...	1,01	6,21	5	24	...	...	...	*	*Purchased by the State from the 1st July 1904 and incorporated with the Eastern Bengal State railway.
...	...	...	2	24	*—1*	10	20	38	10	
89	27	3	7	17	13	...	...	...	...	
21	65	41	24	79	*—6*	22	20	72	74	
...	4,70	5,27	1,28	16	47	8	72	20	3,23	
...	1,31	3,98	81	...	...	...	...	5	...	
10	37	37	7	22	*—23*	*—8*	*—5*	3	...	
...	...	...	...	...	...	...	...	...	85	
7,44,95	9,17,85	11,80,61	10,44,17	12,40,27	8,99,98	9,65,10	11,59,36	11,65,11	12,26,14	

APPEN

Capital outlay on the different classes of

	Mileage.		
	Open.	Under construction.	Total.
PART I.			
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH PASS THROUGH THE GOVERNMENT ACCOUNTS.	Miles.	Miles.	Miles.
(*i*).—State lines worked by Companies	14,620·27	922·64	15,542·91
(*ii*).—State lines worked by the State	5,562·93	371·76	5,934·69
(*iii*).—Companies' lines guaranteed under the old contracts	1,408·36	...	1,408·36
(*iv*).—Companies' lines guaranteed under modern contracts	32·04	...	32·04
(*v*).—District Boards' lines	99·46	3·90	103·36
(*vi*).—Branch Line Companies, receiving rebates from traffic interchanged with main lines.	373·81	...	373·81
TOTAL OPEN LINES AND LINES PARTLY OPEN ...	22,096·87	1,298·30	23,395·17
(*vii*).—Lines wholly under construction by State agency	...	427·38	427·38
(*viii*).—Lines wholly under construction by Companies	...	385·09	385·09
TOTAL (*vii*) AND (*viii*) ...	...	812·47	812·47
(*ix*).—Unclassified expenditure including collieries, &c.	...	...	...
TOTAL PART I ...	22,096·87	2,110·77	24,207·64
PART II.			
CAPITAL EXPENDITURE ON RAILWAYS, THE TRANSACTIONS OF WHICH DO NOT PASS THROUGH THE GOVERNMENT ACCOUNTS.			
(*i*).—Branch Line Companies, receiving rebates from traffic interchanged with main lines.	460·23	154·00	614·23
(*ii*).—Assisted Companies' lines—			
(*a*) Subsidized by the Government of India	162·36	...	162·36
(*b*) Subsidized by Local Governments	136·26	...	136·26
(*c*) Subsidized by District Boards	131·94	...	131·94
(*d*) Receiving land only from Government	1,134·91	147·84	1,282·75
TOTAL (*ii*) ...	1,565·47	147·84	1,713·31
(*iii*).—Unassisted Companies' lines	41·77	...	41·77
(*iv*).—Native State lines—			
(*a*) Worked by Native States	1,317·40	8·95	1,326·35
(*b*) Worked by Companies	1,774·16	...	1,774·16
(*c*) Worked by State railway agency	235·30	...	235·30
TOTAL (*iv*) ...	3,326·86	8·95	3,335·81
(*v*).—Foreign State lines	73·60	...	73·60
TOTAL OPEN LINES AND LINES PARTLY OPEN ...	5,467·93	310·79	5,778·72
(*vi*).—Lines wholly under construction by private Companies	...	52·35	52·35
(*vii*).—Lines wholly under construction by Native States	...	116·81	116·81
TOTAL (*vi*) AND (*vii*) ...	...	169·16	169·16
(*viii*).—State outlay on the Patri branch (Bombay, Baroda and Central India railway)...	...	...	...
TOTAL PART II ...	5,460·17	479·95	5,940·12
GRAND TOTAL ...	27,564·80	2,590·72	30,155·52
ABSTRACT.			
Outlay on open lines and lines partly open—(*i* to *vi*, Part I, and *i* to *v*, Part II) ...	27,564·80	1,609·09	29,173·89
Outlay on lines wholly under construction—(*vii* and *viii*, Part I, and *vi* and *vii*, Part II)	...	981·63	981·63
Unclassified expenditure (*ix*, Part I)	...	...	...

DIX 8.

railways at the close of the year 1904.

Capital outlay at close of 1904. (In thousands of rupees).			Remarks.
Open lines.	Lines under construction.	Total.	
1,98,23,93	2,94,11	2,01,18,04	The outlay included in Part I under "State lines worked by companies" on account of the railways purchased by the State from the East Indian, the South Indian, and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bengal, the Sind, Punjab and Delhi and the Oudh and Rohilkhand Guaranteed Railway Companies, represents the actual Capital expenditure incurred by the companies up to the date of purchase and subsequently by the State.
84,27,11	1,21,30	85,48,41	
26,16,00	...	26,16,00	
29,13	...	*29,13	* Includes Rs. 2,18,000 incurred direct by the Hardwar-Dehra Railway Company.
45,66	66	46,32	
3,04,07	...	†3,04,07	†Includes Rs. 63,07,000 incurred direct by the Ahmedabad-Dholka, Ahmedabad-Parantij, Mymensingh-Jamalpur-Jagannathganj, South Behar and Tapti Valley Railway Companies.
3,12,45,90	4,16,07	3,16,61,97	
...	1,27,11	1,27,11	
...	94,96	94,96	
...	2,22,07	2,22,07	
...	...	88,36	
3,12,45,90	6,38,14	3,19,72,40	
2,51,10	53,38	3,04,48	
1,55,52	...	1,55,52	
1,24,39	...	1,24,39	
61,69	...	61,69	
9,24,21	16,06	9,40,27	
12,65,81	16,06	12,81,87	
27,07	...	27,07	
4,42,49	10,45	4,52,94	
12,66,09	...	12,66,09	
1,32,76	...	1,32,76	
18,41,34	10,45	18,51,79	
1,50,69	...	1,50,69	
35,36,01	79,89	36,15,90	
...	17,36	17,36	
...	22,48	22,48	
...	39,84	39,84	
...	...	8,08	
35,36,01	1,19,73	36,63,82	
3,47,81,91	7,57,87	3,56,36,22	
3,47,81,91	4,95,96	§3,52,85,95	§ Includes Rs. 8,08,000. Item (viii) of Part II.
...	2,61,91	2,61,91	
...	...	88,36	

APPEN

Capital liability on account of Railways classed

Railways.	(1) Share Capital of purchased Railways being paid off by Annuities.						(2)	(3)	(4)	(5)	(6)
		Deduct.									
	Commuted value of stock purchased.	Commuted Capital representing Annuities which were purchased by creation of debt (liability included in column 3).	New Stock of Great Indian Peninsula Railway Company issued in exchange for portion of Annuity.	Net capital to be paid off by Annuities.	*Deduct.* amount redeemed by Annuity payments.	Net outstanding.	State outlay.	Debt incurred for purchase of Railways.	Capital advanced by Government to Companies.	Capital raised by Companies on Secretary of State's guarantee (including over drafts).	Total Capital liability.
India, General.	£	£	£	£	£	£	£	£	£	£	£
1. East Indian	33,750,000	7,299,157	...	25,450,843	2,217,308	23,233,535	6,421,331	7,800,133	...	7,000,300	44,455,304
2. Rajputana-Malwa (incldg. Godhra-Ratlam-Nagda).	...	...	...	...	...	...	10,539,546	...	...	...	10,539,546
3. Rewari-Phulera	...	...	...	...	...	...	242,567	...	...	...	242,567
4. Palanpur-Deesa	...	...	...	...	...	...	15,805	...	...	...	15,805
5. Bhopal	...	...	...	...	...	...	210,194	...	...	...	210,194
6. State railway stores	...	...	...	...	...	...	1,558	...	...	...	1,558
7. Exchange in England for stores, purchased and remaining unappropriated.	...	...	...	...	...	...	37,243	...	...	...	37,243
Central Provinces.											
8. Warora Colliery	...	...	...	...	...	...	94,378	...	...	...	94,378
9. Umaria ,, (depreciation on works).	...	...	...	...	...	...	12,178	...	...	...	12,178
10. Bilaspur-Etawah	...	...	...	...	...	...	5,009	...	...	...	5,009
11. Nagpur-Chhatisgarh (depreciation account).	...	...	...	...	...	...	43,802	...	...	...	43,802
Burma.											
12. Pegu-Moulmein	...	...	...	...	...	...	17,166	...	...	...	17,166
13. Henzada-Kyangin	...	...	...	...	...	...	9,219	...	...	...	9,219
Assam.											
14. Jorhat	...	...	...	...	...	...	60,252	...	...	...	60,252
Bengal.											
15. Eastern Bengal system	3,391,917	5,43,817	...	2,848,100	217,724	2,630,376	8,647,642	875,048	...	...	12,153,066
16. Murshidabad Branch	...	...	...	...	...	...	431,367	...	...	...	431,367
17. Dhubri-Gauhati	...	...	...	...	...	...	146,065	...	...	...	146,065
18. Tirhoot	...	...	...	...	...	...	3,501,432	...	...	...	3,501,432
19. Tirhoot new Extensions	...	...	...	...	...	...	264,940	...	...	...	264,940
20. Banaghat-Bhagwangola	...	...	...	...	...	...	20,163	...	...	...	20,163
21. Katihar-Godagari	...	...	...	...	...	...	4,584	...	...	...	4,584
United Provinces.											
22. Oudh and Rohilkhand	...	...	...	...	...	...	3,097,039	10,734,405	...	...	13,831,444
23. Allahabad-Fyzabad	...	...	...	...	...	...	700,730	...	...	...	700,730
24. Agra-Delhi Chord	...	...	...	...	...	...	706,037	...	...	...	706,037
25. Allahabad-Jaunpur	...	...	...	...	...	...	4,834	...	...	...	4,834
Punjab.											
26. North Western	14,009,124	4,911,225	...	9,097,899	643,990	8,453,909	27,871,106	4,240,723	...	...	40,565,738
27. Conversion of Khushalgarh-Kohat-Thal, and Bridge over Indus.	...	...	...	...	...	...	169	...	...	...	169
28. Jech Doab (southern sec.)	...	...	...	...	...	...	223,502	...	...	...	223,502
29. Quetta-Nushki	...	...	...	...	...	...	411,393	...	...	...	411,393
30. Peshawar Railway Reserve	...	...	...	...	...	...	19,243	...	...	...	19,243
31. Frontier Railway Reserve	...	...	...	...	...	...	293,234	...	...	...	293,234
32. Petroleum Operations, Baluchistan.	...	...	...	...	...	...	7,946	...	...	...	7,946
33. Jullunder Hoshiarpur	...	...	...	...	...	...	969	...	...	...	969
34. Ludhiana-Ferozepore	...	...	...	...	...	...	1,887	...	...	...	1,887
Carried over ...	50,151,041	12,754,199	...	37,596,842	3,079,022	34,517,820	64,064,525	23,650,314	...	7,000,300	129,032,959

DIX 9.

as State railways at end of 1904.

Railways.	(1) Share Capital of purchased Railways being paid off by annuities.						(2)	(3)	(4)	(5)	(6)
		Deduct.									
	Commuted value of stock purchased.	Commuted capital representing annuities which were purchased by creation of debt (liability included in column 3).	New stock of Great Indian Peninsula Railway Company issued in exchange for portion of annuity.	Net capital to be paid off by annuities.	*Deduct* amount redeemed by annuity payments.	Net outstanding.	State outlay.	Debt incurred for purchase of Railways.	Capital advanced by Government to Companies.	Capital raised by Companies on Secretary of State's guarantee (including over drafts.)	Total capital liability.
	£	£	£	£	£	£	£	£	£	£	£
Brought forward ...	50,151,041	12,754,199	...	37,396,842	3,079,022	34,317,820	64,064,525	23,650,314	...	7,000,300	129,032,959
Madras.											
35. South Indian (including Pamban Branch).	...	...	...	...	...	...	1,911,832	4,726,168	...	1,375,000	8,013,000
36. Tinnevelly-Quilon (British section).	...	...	...	...	...	...	49,212	...	...	219,225	268,437
38. Tinnevelly-Quilon (Native) (State section).	...	...	...	...	...	...	365,723	...	...	405,775	771,498
39. Ashikal-Mangalore . .	...	...	...	...	...	...	421,308	...	...	...	421,308
40. North-East line, Madras railway (East Coast Railway, southern section).	...	...	...	...	...	...	4,293,056	...	...	...	4,293,056
41. Nilgiri	...	...	...	...	...	...	236,548	...	...	...	236,548
42. Bezwada extension . .	...	...	...	...	...	...	78,382	...	...	...	78,382
43. Guntakal-Mysore frontier .	...	...	...	...	...	...	394,314	...	...	...	394,314
44. Tanjore District Board .	...	...	...	...	...	...	187,450	...	82,315	41,047	310,812
45. Vizagapatam-Raipur . .	...	...	...	...	...	...	16,336	...	...	...	16,336
46. Hospet-Kottur . . .	...	...	...	...	...	...	71,427	...	...	...	71,427
47. Bellary-Rayadrug . .	...	...	...	...	...	...	29,650	...	...	...	29,650
48. Tirupattur-Krishnagiri .	...	...	...	...	...	...	50,086	...	...	...	50,086
49. Morappur-Dharmapuri .	...	...	...	...	...	...	34,170	...	...	...	34,170
50. Coonoor-Ootacamund . .	...	...	...	...	...	...	2,414	...	...	...	2,414
Bombay.											
51. Great Indian Peninsula .	34,859,218	...	1,750,000	33,109,218	1,548,224	31,560,994	2,313,398	5,958,587	850,000	2,575,000	43,257,969
52. Jodhpur-Hyderabad (British section).	...	...	...	...	...	...	263,872	...	...	...	263,872
53. Southern Mahratta (depreciation on works).	...	...	...	...	...	...	35,138	...	...	...	35,138
54. Sabarmati-Dholka . .	...	...	...	...	...	...	3,993	...	...	...	3,993
55. Lower Sindh Extension .	...	...	...	...	...	...	201,908	...	...	...	201,908
	85,010,259	12,754,199	1,750,000	70,506,060	4,627,256	65,878,804	75,024,742	34,335,069	932,315	11,616,347	187,787,277
Leased Lines.											
56. Assam-Bengal . . .	...	...	...	...	...	...	4,904,231	...	...	2,855,900	7,760,131
57. Bengal Central . . .	...	...	...	...	...	...	...	...	515,861	500,000	1,015,861
58. Bengal-Nagpur . . .	...	...	...	...	...	...	2,061,962	...	8,120,131	8,078,111	18,260,204
59. Burma	...	...	...	...	...	...	5,127,488	...	...	3,573,596	8,701,084
60. Indian Midland . . .	...	...	...	...	...	...	...	...	1,981,179	5,947,659	7,928,838
61. Lucknow-Bareilly. . .	...	...	...	...	...	...	341,409	...	303,945	147,000	792,354
62. Mysore	...	...	...	...	...	...	...	...	...	1,200,000	1,200,000
63. Southern Mahratta . .	...	...	...	...	...	...	1,105,228	...	2,129,900	4,693,100	7,928,228
	...	...	...	...	...	...	13,540,318	...	13,051,016	26,995,366	53,586,700
Branch Line.											
64. Hardwar-Dehra . . .	...	...	...	...	...	...	...	...	...	194,200	194,200
	...	...	...	...	...	...	...	...	...	194,200	194,200
Total .	85,010,259	12,754,199	1,750,000	70,506,060	4,627,256	65,878,804	88,565,060	34,335,069	13,983,331	38,805,913	241,568,177

Main results of working Indian railways

Year.	Mileage open.	In thousands of rupees.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on Capital outlay on lines wholly and partly open.	Passengers.			Goods.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1853 .	20	37,96	90	41	49	87	45·56	1·29	...	...	...	...	...	...
1854 .	71	4,00,00	2,31	1,42	89	63	61·47	0·22	...	...	...	...	...	...
1855 .	169	5,50,00	8,13	4,55	3,58	93	55·97	0·65	...	...	...	...	...	...
1856 .	272	8,00,00	16,10	6,74	9,36	114	41·87	1·17	...	...	...	...	...	...
1857 .	287	12,00,00	25,43	10,54	14,89	170	41·45	1·24	...	...	...	...	...	...
1858 .	427	16,00,00	33,82	15,63	18,19	152	46·22	1·14	...	...	...	...	...	...
1859 .	625	22,50,00	57,24	27,74	29,50	176	48·46	1·31	...	...	...	...	...	...
1860 .	838	26,66,00	66,67	37,08	29,59	153	55·61	1·11	...	...	...	...	...	...
1861 .	1,587	34,00,00	98,63	58,09	40,54	120	58·90	1·19	...	...	...	...	...	...
1862 .	2,333	48,00,00	1,34,45	80,32	54,13	111	59·74	1·13	...	...	...	...	...	...
1863 .	2,507	53,00,00	2,20,47	1,33,04	87,43	169	60·34	1·65	...	...	...	...	...	...
1864 .	2,958	58,00,00	2,85,89	1,70,85	1,15,04	186	59·76	1·98	...	...	...	...	...	...
1865 .	3,363	63,00,00	4,25,84	2,24,27	2,01,57	244	52·43	3·20	...	...	...	...	...	...
1866 .	3,563	70,00,00	4,91,91	2,59,38	2,32,53	266	52·73	3·32	...	...	...	...	...	...
1867 .	3,929	80,00,00	5,44,54	2,93,76	2,50,78	266	53·95	3·13	...	...	...	...	...	...
1868 .	4,008	84,00,00	5,67,09	3,07,46	2,59,63	272	54·22	3·09	...	...	...	...	...	...
1869 .	4,255	89,00,00	6,13,10	3,41,74	2,71,36	277	55·74	3·05	...	...	...	...	...	...
1870 .	4,771	90,00,50	6,66,67	3,63,15	3,03,52	269	54·47	3·37	...	...	...	...	...	
1871 .	5,074	90,00,70	6,59,20	3,67,97	2,91,23	250	55·82	3·24	19,283	2,02,49	...	3,542	4,20,03	...
1872 .	5,369	90,00,90	6,82,96	3,73,45	3,09,51	245	54·68	3·44	20,847	2,17,66	...	3,535	4,13,70	14·87
1873 .	5,697	91,72,60	7,22,90	3,77,85	3,45,05	244	52·28	3·76	22,835	2,39,41	...	4,078	4,68,22	14·00
1874 .	6,226	95,87,15	8,33,77	4,03,89	4,29,88	258	48·44	4·48	24,977	2,38,93	...	5,503	5,75,30	10·01
1875 .	6,541	1,00,96,28	7,91,37	3,97,48	3,93,89	233	50·23	3·90	27,479	2,68,32	...	5,095	5,12,56	10·87
1876 .	6,860	1,04,77,85	9,33,83	4,46,45	4,87,38	262	47·81	4·65	31,353	3,18,61	...	6,613	5,74,04	8·48
1877 .	7,320	1,09,04,24	12,11,28	5,38,68	6,72,60	318	44·47	6·17	35,104	3,29,33	...	9,272	9,00,29	8·82
1878 .	8,201	1,18,29,55	11,25,30	5,62,38	5,62,92	269	49·97	4·76	39,458	3,37,87	...	8,320	7,28,95	8·75

DIX 10.

as one system from the commencement.

Year.	Mileage open.	In thousands of rupees.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on capital outlay on lines wholly and partly open.	Passengers.			Goods.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1879	8,475	1,22,32,97	12,08,15	6,26,28	5,81,87	275	51·84	4·76	44,050	3,65,36	...	3,968	7,80,61	3·65
1880	8,996	1,28,56,91	12,86,55	6,48,00	6,38,55	282	50·37	4·97	49,155	4,57,29	...	10,394	9,22,63	3·63
1881	9,858	1,40,80,80	14,32,31	7,07,12	7,25,19	285	49·37	5·16	54,764	3,79,23	2·78	13,214	9,55,97	2·95
1882	10,069	1,43,24,42	15,35,23	7,66,81	7,68,42	294	49·95	5·36	58,876	4,08,37	2·71	14,833	10,15,97	2·91
1883	10,447	1,48,30,56	16,38,94	7,97,05	8,41,89	301	48·62	5·68	65,099	4,09,08	2·60	16,999	11,28,89	2·80
1884	11,527	1,55,45,04	16,06,62	8,15,62	7,91,00	276	50·76	5·09	73,815	4,46,84	2·56	16,663	10,56,59	2·85
1885	12,208	1,61,91,78	17,98,96	8,86,33	9,12,63	284	49·27	5·64	80,865	4,78,12	2·52	18,925	11,91,54	2·69
1886	12,865	1,70,49,89	18,70,46	8,93,10	9,77,36	285	47·75	5·73	88,436	5,09,77	2·51	19,576	12,68,59	2·72
1887	14,068	1,82,87,93	18,46,81	9,10,33	9,36,48	260	49·31	5·12	95,412	5,35,32	2·51	20,196	11,92,93	2·17
1888	14,525	1,93,04,33	19,76,45	9,87,44	9,89,01	263	49·96	5·12	103,156	5,69,06	2·71	22,393	12,79,04	2·87
1889	15,900	2,05,04,61	20,49,37	10,37,74	10,11,63	257	50·64	4·93	110,650	6,13,74	2·52	22,249	13,05,56	2·88
1890	16,404	2,13,67,04	20,67,01	10,30,89	10,36,12	243	49·87	4·85	114,062	6,25,81	2·51	23,613	12,99,52	2·71
1891	17,283	2,21,06,42	24,04,03	11,30,39	12,73,64	271	47·02	5·76	122,855	6,86,13	2·52	26,159	15,60,81	2·75
1892	17,769	2,27,30,00	23,22,23	10,90,35	12,32,58	253	46·94	5·42	127,388	6,91,15	2·52	26,335	14,77,52	2·70
1893	18,459	2,33,17,87	24,08,42	11,34,77	12,73,65	254	47·12	5·46	135,520	7,29,57	2·50	28,847	15,21,63	2·60
1894	18,840	2,37,79,01	25,50,89	11,98,40	13,52,49	262	46·98	5·69	145,727	7,57,58	2·56	32,644	16,24,82	2·42
1895	19,467	2,44,38,05	26,23,69	12,11,99	14,11,70	261	46·19	5·78	153,081	8,02,21	2·49	33,628	16,36,94	2·36
1896	20,209	2,53,95,23	25,36,14	12,13,84	13,22,30	245	47·86	4·92	159,509	8,22,07	2·45	32,471	15,41,51	2·45
1897	21,115	2,82,12,04	25,60,11	12,47,73	13,12,38	233	48·74	4·65	150,584	7,62,13	2·47	33,926	15,58,89	2·36
1898	22,024	2,92,09,20	27,41,31	12,98,68	14,42,63	244	47·37	4·94	151,566	7,58,68	2·50	35,642	17,84,97	2·00
1899	23,507	3,08,50,12	29,36,78	13,93,36	15,43,42	246	47·45	5·00	161,720	8,09,39	2·51	39,748	19,19,82	2·98
1900	*Revised.* 24,752	3,29,53,34	31,54,32	15,09,31	16,45,01	245	47·85	4·99	176,308	8,95,07	2·51	42,896	20,36,52	2·88
1901	25,363	3,39,16,89	33,60,38	15,72,45	17,87,93	255	46·79	5·27	194,749	10,07,17	2·48	43,392	21,23,67	2·77
1902	25,931	3,49,77,34	33,92,69	16,70,49	17,22,20	252	49·24	4·92	196,648	10,27,48	2·51	45,537	21,23,41	2·68
1903	*Revised.* 26,956	3,41,11,23	36,00,82	17,11,09	18,89,73	257	47·52	5·54	210,231	10,98,14	2·51	47,684	22,41,92	2·64
1904	27,565	3,52,85,95	39,64,97	18,77,50	20,87,47	277	47·36	5·91	227,097	11,76,20	2 51	52,051	25,18,81	2·39

APPEN

Summary of the general Indian Railways

Calendar year.	GENERAL RESULTS			
	Total Capital outlay in thousands of rupees.	Gross earnings in thousands of rupees.	TOTAL WORKING EXPENSES.	
			Amount in thousands of rupees.	Proportion per cent. to gross earnings.
1	2	3	4	5
1900	3,29,53,34	31,54,32	15,09,31	47·85
1901	3,39,16,89	33,60,38	15,72,45	46·79
1902	3,49,77,34	33,92,69	16,70,49	49·24
1903	3,41,11,23	36,00,82	17,11,09	47·52
1904	3,52,85,95	39,64,97	18,77,50	47·35

Calendar year.	GROSS EARNINGS IN THOUSANDS									
	COACHING TRAFFIC.							GOODS		
	1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Other Coaching Traffic.	Total Coaching Traffic (sum of 15 to 20).	Total Goods Traffic (sum of 23 to 27).	General merchandise.	Coal and coke for the public and foreign railways.
14	15	16	17	18	19	20	21	22	23	24
1900	31,83	47,08	56,03	7,51,66	8,47	1,31,37	10,26,44	20,36,52	16,90,35	2,11,71
1901	32,78	52,43	64,39	8,48,25	9,32	1,34,71	11,41,88	21,23,67	17,53,14	2,35,01
1902	38,57	56,59	67,60	8,54,97	9,75	1,47,60	11,75,08	21,23,41	17,40,72	2,26,75
1903	41,56	58,13	71,68	9,16,31	10,46	1,56,26	12,54,40	22,41,92	18,53,45	2,29,93
1904	40,76	59,78	74,84	9,89,63	11,19	1,61,36	13,37,56	25,18,31	20,35,56	2,56,13

Number of passengers and quantity of goods carried, the average miles

Calendar year.	PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND											
	1ST CLASS.			2ND CLASS.			INTERMEDIATE CLASS.			3RD CLASS.		
	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.
36	37	38	39	40	41	42	43	44	45	46	47	48
1900	521	74·65	12·59	2,285	44·04	5·49	5,703	58·93	3·11	158,954	39·16	2·31
1901	532	92·82	12·75	2,405	76·27	5·49	6,670	59·94	3·09	170,416	41·27	2·31
1902	563	102·28	12·86	2,530	82·39	5·21	6,813	61·30	3·11	171,716	41·08	2·33
1903	594	101·71	13·21	2,580	78·13	5·54	7,214	61.64	3·09	184,292	40·94	2·33
1904	608	95·98	13·41	2,715	74·23	5·69	7,394	62·89	3·09	199,651	40·71	2·34

DIX 11.

results of working
treated as one system.

OF WORKING.

Net earnings.		Per mile open.			Per train-mile.			Remarks.
Amount in thousands of rupees.	Percentage on Capital outlay.	Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
6	7	8	9	10	11	12	13	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
16,45,01	4·99	13,754	6,098	8,646	3·75	1·79	1·96	
17,87,93	5·27	13,249	6,200	7,049	3·81	1·78	2·03	
17,22,20	4·92	13,084	6,442	6,642	3·67	1·81	1·86	
16,89,73	5·54	13,358	6,348	7,010	3·75	1·78	1·97	The decrease in the capital outlay for 1903 is due to the revision of the capital outlay hitherto adopted for lines purchased by the State from Guaranteed Railway companies.
20,87,47	5·91	14,384	6,811	7,573	3·86	1·83	2·03	

OF RUPEES.

Traffic.			Working expenses in thousands of rupees.						
Military stores.	Revenue stores, including coal and material for construction.	Miscellaneous.	Electric telegraph.	Steamboat and sundries.	Engineering.	Locomotive.	Carriage and wagon.	Traffic.	General.	Other expenses (steamboat, contribution to Provident Fund and special and miscellaneous expenditure).
25	26	27	28	29	30	31	32	33	34	35
13,78	93,32	27,36	7,93	83,43	3,61,79	5,26,50	1,39,31	2,49,27	1,47,43	85,01
14,97	96,41	24,14	7,49	87,34	3,55,93	5,59,13	1,51,90	2,63,92	1,57,85	83,72
21,67	1,14,93	25,08	7,32	86,88	3,89,67	5,78,85	1,76,38	2,73,70	1,63,70	88,19
23,07	1,13,90	27,51	7,84	96,66	3,88,99	6,11,95	1,52,51	2,92,19	1,68,91	96,54
19,14	1,31,04	32,27	8,00	1,00,60	4,37,28	6,72,07	1,76,74	3,10,25	1,75,67	1,05,49

carried and the average rate charged, and the train-mileage run by railways in India.

The average rate charged.					Train-miles run (in thousands).				Goods traffic.		
Season and vendors' tickets.			Total No. of passengers carried.								
No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Coaching.	Goods.	Mixed.	Total train-mileage (includes miscellaneous train-mileage).	Tons carried (in thousands).	Average miles carried.	Average rate charged per mile in pies.
49	50	51	52	53	54	55	56	57	58	59	60
13,845	...	...	176,592	40·09	18,114	34,252	28,827	84,193	42,896	154·94	5·86
14,726	8·63	1·71	194,746	40·42	19,701	34,274	31,561	88,265	43,392	162·75	5·77
15,026	8·85	1·41	196,648	40·03	21,768	36,019	31,781	92,527	45,537	157·54	5·62
15,551	8·75	1·48	210,231	39·90	25,889	36,308	31,438	95,960	47,684	159·93	5·64
16,729	9·08	1·41	227,097	39·66	31,577	38,797	28,620	102,721	52,051	172·42	5·39

APPEN

Principal commodities carried by railways and the

Numbers.		Railway system *Vide* Appendix I.	I. Apparel including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.		II. Coal and coke carried for the public and foreign railways.		1. Raw.		2. (a) Twist and yarn, European.		2. (b) Twist and yarn, Indian.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	33	309	34,322	39,218	151	951	510	1,362	4	13
2	(a), (b) & (d)	Bengal-Nagpur	326	7,577	1,283,062	16,29,035	10,758	1,32,115	3,261	23,702	14,025	1,77,125
3	(a), (c) to (f), & (m) & (n).	Bombay, Baroda and Central India	611	14,700	27,513	1,33,310	153,646	14,18,127	420	8,028	12,463	1,76,094
4	...	Eastern Bengal State	1,359	16,891	399,112	3,19,006	2,151	10,994	2,593	20,563	3,011	20,315
5	...	East Indian	2,920	92,619	5,972,466	1,01,87,223	47,496	5,78,389	973	27,039	19,188	1,84,537
6	...	Great Indian Peninsula	1,293	50,950	163,223	3,46,344	296,230	70,11,275	12,316	2,21,084	14,318	1,70,118
7	(a) to (c)	Madras	199	6,569	580,696	14,56,789	40,422	4,34,411	5,737	59,060	14,059	1,19,766
9	(a) & (b)	Nizam's Guaranteed State	76	1,277	344,644	11,60,163	3,090	23,296	3,280	37,545	1,854	24,807
10	...	North Western State	3,902	1,00,824	92,363	2,64,099	92,765	14,33,262	1,911	40,557	6,972	1,13,865
11	...	Oudh and Rohilkhand State	1,164	13,925	48,159	1,33,302	11,784	69,566	2,530	20,749	9,016	65,238
		3′ 3½″ gauge.										
12	...	Assam-Bengal	254	3,177	17,984	46,275	2,521	15,575	754	3,377	86	761
13	...	Bengal and North-Western	729	10,352	65,575	1,43,030	1,015	10,671	450	6,033	4,123	46,798
14	...	Bengal-Dooars	2	10	15,172	40,290	...	...	...	...	17	60
15	...	Bhavnagar-Gondal-Junagad-Porbandar	444	3,748	7,017	8,037	51,569	2,54,107	44	336	999	5,565
16	...	Burma	546	9,575	980	2,063	1,883	12,871	4,281	76,613	217	2,478
17	...	Deoghur	...	...	2,227	704	...	...	...	...	45	14
18	...	Dibru-Sadiya	...	...	260,696	4,41,328	119	1,614	...	...	...	...
9	(c)	Hyderabad-Godavari Valley	69	2,236	3,172	16,570	16,188	2,06,224	303	5,594	910	19,550
19	...	Jodhpur-Bikaner	285	3,406	25,010	77,166	15,750	70,249	43	299	843	5,864
7	(d) & (e)	Madras	24	209	3,157	17,044	393	3,679	3	15	340	1,533
8	(b) & (g) to (l)	Rajputana-Malwa	935	22,738	33,190	88,890	68,669	9,88,249	244	3,495	12,194	2,89,928
20	(a) & (b)	Rohilkund and Kumaon	367	3,997	619	619	36	334	32	161	1,163	5,017
21	...	South Indian	195	3,741	16,627	23,633	29,902	1,59,050	2,617	31,740	9,418	73,524
22	...	Southern Mahratta	291	3,833	8,247	30,700	163,594	8,15,706	2,772	40,076	9,007	85,232
23	...	Udaipur-Chitor	9	76	...	...	700	3,267	3	25	31	211
		2′ 6″ gauge.										
25	...	Barsi Light	2	7	69	73	9,558	25,346	53	189	141	323
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	46	293	211	749	5,980	38,262	2	11	90	221
2	(c)	Parlakimedi Light	...	2	...	...	3	3	...	...	150	131
20	(c)	Powayan Light	...	...	...	...	65	250	...	...	...	...
	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	96	361	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	1,970	4,758	...	...	...	...	...	...
29	...	Kalka-Simla	400	10,933	564	8,887	4	90	88	1,735	46	1,041
		2′ 0″ gauge.										
36	...	Darjeeling-Himalayan	236	6,463	1,906	18,168	11	333	3	63	133	3,812
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...
		TOTAL 1904	16,685	3,90,217	9,396,946	2,58,27,600	1,024,713	1,37,18,934	45,273	6,28,470	134,831	16,94,096
		TOTAL 1903	16,108	3,68,159	8,563,009	2,30,47,386	1,045,925	1,67,23,689	36,146	5,35,999	140,722	16,46,036
		INCREASE	577	22,058	833,937	25,80,214	...	...	9,127	92,471	...	...
		DECREASE	...	...	...	...	21,212	20,04,755	...	...	5,892	51,940

DIX 17.

earnings therefrom during the calendar year 1904.

III.								IV.		V.								Number.
COTTON.										DRUGS.								
MANUFACTURED.												2. NON-INTOXICATING.						
(c) Piece-goods, European.		(d) Piece-goods, Indian.		(e) Others.		TOTAL.		Chemicals, excepting saltpetre.		1. Intoxicating, other than opium.		(a) Medicinal preparations.		(b) Others.		TOTAL.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
1,896	5,330	20	103	...	...	2,581	7,764	7	33	2	32	31	399	5	44	38	475	1
7,674	85,102	4,184	60,563	...	...	39,902	4,78,607	280	4,835	66	1,022	...	...	1,244	13,172	1,310	14,194	2
11,594	2,52,850	20,482	3,31,943	779	16,623	198,384	23,03,606	626	11,636	13	365	79	2,064	2,767	29,861	2,859	42,290	3
26,407	3,61,640	715	6,743	...	...	34,677	3,20,255	766	6,006	126	2,759	47	510	848	12,475	1,021	15,744	4
55,902	15,15,540	7,585	1,04,330	1,777	44,017	133,811	24,53,912	3,639	62,226	186	2,854	841	25,166	2,976	36,070	4,003	64,090	5
32,333	9,14,752	13,471	2,60,846	1,344	41,509	370,032	86,19,584	1,378	39,903	153	4,722	251	11,486	3,245	76,773	3,654	94,981	6
9,016	1,33,706	6,930	170,583	234	2,643	76,447	8,09,189	63	1,719	...	1	220	6,993	3,316	34,084	3,536	41,078	7
2,250	34,149	903	12,874	66	913	11,443	1,33,684	126	2,239	16	255	68	1,459	718	6,053	802	7,767	9
19,512	5,26,690	30,673	6,47,202	963	19,473	153,785	27,81,049	3,491	69,473	515	6,719	457	16,729	8,519	1,25,844	9,491	1,51,293	10
10,138	65,723	5,709	47,701	169	1,996	39,346	2,70,973	395	3,890	142	2,898	196	2,151	1,114	11,224	1,454	16,283	11
2,903	22,828	317	2,332	7	46	6,488	44,919	159	943	9	214	110	1,028	181	1,246	300	2,558	12
17,361	1,69,266	5,561	51,948	242	2,809	28,752	2,67,425	1,397	7,487	77	1,681	5	140	11,374	54,823	11,456	56,643	13
633	3,032	4	17	...	...	644	3,109	...	...	...	...	...	...	477	2,679	477	2,679	14
717	5,403	1,662	10,743	7	47	54,998	3,76,203	51	564	17	236	55	606	84	546	156	1,388	15
7,046	1,20,027	177	2,137	...	...	13,554	2,14,126	111	2,359	...	...	69	1,717	233	2,559	302	4,277	16
235	69	10	4	24	7	304	94	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	119	1,614	...	...	513	6,863	...	...	...	...	513	6,863	18
593	9,634	929	14,248	33	421	18,956	2,55,871	17	270	5	92	20	377	38	508	63	977	9
939	8,220	2,362	12,639	51	666	19,998	97,726	66	690	13	222	21	315	306	3,042	340	3,579	19
268	1,605	244	1,297	6	27	1,254	8,155	...	13	...	...	34	321	486	3,415	520	3,736	7
12,592	3,04,500	21,429	5,13,377	859	23,433	115,967	21,23,962	286	7,363	103	2,187	66	1,430	2,036	37,241	2,204	40,838	3
459	2,747	1,778	11,734	97	642	3,565	20,635	75	606	66	596	4	40	1,314	9,823	1,384	10,459	20
8,360	1,18,614	4,397	42,542	240	2,284	54,434	4,28,934	112	2,915	280	2,054	326	5,117	2,671	20,503	3,277	27,674	21
4,927	77,710	5,180	68,516	542	7,791	196,022	10,95,031	600	7,252	26	414	184	2,918	530	6,038	740	9,369	22
78	522	459	3,491	6	65	1,277	7,581	...	3	8	72	...	5	57	416	65	493	23
172	598	76	207	10	35	10,010	26,698	8	22	...	...	2	7	25	72	27	79	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
50	231	240	1,141	9	51	6,241	39,937	17	113	119	452	13	141	29	135	161	728	31
14	8	27	26	...	...	194	168	3	4	...	...	...	...	5	12	5	12	2
...	...	...	...	...	...	85	150	...	...	...	...	...	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
46	324	...	...	...	...	46	224	...	...	...	...	...	...	...	...	...	...	33
9	63	...	...	...	...	9	63	...	...	...	...	8	52	...	...	8	52	34
27	611	64	1,501	...	8	229	4,986	...	...	1	17	36	1,049	11	127	48	1,353	29
516	14,332	103	3,212	45	1,213	810	22,978	...	...	...	...	79	1,553	24	765	103	2,318	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
335,567	46,45,983	135,591	23,83,989	7,599	1,66,722	1,583,574	2,30,38,134	13,773	2,33,014	2,460	38,607	3,226	63,634	44,642	5,02,210	50,326	6,24,741	
224,127	44,56,661	139,681	23,89,720	8,343	1,69,746	1,594,925	2,49,20,871	12,530	2,12,587	2,010	35,009	3,249	76,285	40,383	4,93,165	45,642	6,05,459	
11,440	1,89,263	...	...	...	...	...	...	1,243	20,427	450	2,698	...	7,549	4,259	9,045	4,684	19,292	
...	...	4,070	5,731	744	2,024	11,351	18,82,737	...	...	...	...	25	...	...	...	...	...	

APPEN

Principal commodities carried by railways and the

Number.			VI															
			Dyes and Tans.															
			(1) Alizarine and aniline dyes.		(2) Cutch.		(3) Indigo.		(4) Myrabolams.		(5) Tanning barks.		(6) Turmeric.		(7) Others.		Total.	
Main head.	Sub-head.	Railway system *vide* Appendix I.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5' 6" gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal-Central	...	...	1	3	...	...	...	...	37	312	426	1,924	4	40	467	2,279
2	(a), (b) & (d)	Bengal-Nagpur	...	...	...	...	...	...	20,704	1,70,736	1,454	2,491	6,623	49,989	1,104	12,548	29,885	2,35,764
3	(a), (c) to (f) & (m) & (n)	Bombay, Baroda and Central India.	1,178	26,426	139	1,179	39	889	285	2,532	1,258	13,627	2,771	63,590	2,081	38,487	7,751	1,38,730
4	...	Eastern Bengal State	...	...	262	2,144	140	1,619	...	...	...	...	3,297	19,252	163	1,832	3,862	24,847
5	...	East Indian	160	3,921	1,704	21,799	1,878	39,493	5,549	37,200	3,463	6,345	5,963	90,223	3,774	42,503	22,191	2,47,484
6	...	Great Indian Peninsula	1,865	68,210	1,190	22,902	445	14,743	36,210	2,89,421	11,847	56,698	9,628	1,39,279	2,715	45,376	63,820	6,36,528
7	(a) to(c	Madras	383	4,915	21	203	1,285	18,236	2,580	15,070	19,777	1,31,885	9,813	59,016	934	9,063	34,803	2,38,378
9	(a) & (b)	Nizam's Guaranteed State.	253	3,111	29	206	13	246	222	1,394	3,691	21,921	296	2,079	130	1,616	4,643	31,193
10	...	North Western State	712	24,135	96	1,111	1,291	35,906	433	5,225	957	2,947	3,207	46,348	7,231	93,780	13,947	2,09,352
11	...	Oudh and Rohilkhand State.	86	1,049	469	3,384	109	1,513	240	1,525	202	683	1,612	16,826	396	5,662	3,174	28,643
		3' 3½" gauge.																
12	...	Assam-Bengal	...	...	19	83	...	...	4	15	...	...	18	150	12	136	53	404
13	...	Bengal and North-Western.	39	465	1,493	13,070	1,246	12,666	137	1,035	1,166	4,183	2,368	20,583	693	5,490	7,132	58,392
14	...	Bengal-Dooars	...	...	...	...	...	...	...	...	...	...	...	...	5	30	5	30
15	...	Bhavnagar-Gondal-Junagad Porbandar.	110	725	14	66	4	28	67	379	19	74	238	1,251	212	1,277	664	3,800
16	...	Burma	1	16	3,155	35,336	1	53	104	1,058	310	2,976	1,127	8,261	58	602	4,756	48,303
17	...	Deoghur	...	...	...	...	...	...	...	...	...	...	25	7	...	...	25	7
18	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	(c)	Hyderabad-Godavari Valley.	15	288	78	1,264	34	582	11	41	127	269	345	3,667	62	608	672	6,829
10	...	Jodhpur-Bikaner	34	137	1	13	103	1,624	12	57	1,071	5,197	196	1,220	1,766	11,089	3,173	19,647
7	(d) & (e)	Madras	...	...	...	...	...	...	...	...	1	4	44	140	52	161	97	305
3	(b) & (g) to (i)	Rajputana-Malwa	984	41,835	198	2,472	625	5,955	409	3,195	3,364	19,380	2,583	43,800	1,891	43,118	10,035	1,59,655
20	(a) & (b)	Rohilkund and Kumaon.	12	86	764	3,635	13	88	21	150	857	3,204	489	2,062	58	579	2,217	9,803
21	...	South Indian	593	6,733	226	1,489	432	3,539	524	3,059	4,604	40,244	2,067	17,069	1,369	12,706	9,815	84,859
22	...	Southern Mahratta	255	3,907	236	1,847	219	2,397	9,868	40,007	12,554	34,189	8,458	58,588	641	5,448	32,221	1,46,383
23	...	Udaipur-Chitor	9	87	1	10	6	42	4	19	...	...	47	301	29	195	96	654
		2' 6" gauge.																
25	...	Barsi Light	6	29	22	55	...	...	16	39	2	7	418	1,133	39	120	503	1,374
26	...	Bukhtiarpore-Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	4	20	4	8	...	1	4	13	...	...	24	93	45	195	81	330
2	(c)	Parlakimedi Light	...	...	...	...	...	...	279	237	26	23	110	92	1	3	416	355
29	(c)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	...	Tespur-Balipara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	Kalka-Simla	6	136	...	11	...	...	...	...	...	...	...	2	5	77	11	226
		2' 0" gauge.																
36	...	Darjeeling-Himalayan	...	...	5	123	1	53	...	3	...	...	...	10	19	443	25	632
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1904	6,756	1,68,190	10,127	1,13,233	7,944	1,39,485	77,697	5,72,410	66,787	3,46,569	61,792	6,43,574	25,498	3,31,685	2,56,590	23,35,346
		TOTAL 1903	6,320	1,49,492	11,578	1,20,188	9,085	1,67,792	69,993	5,61,496	66,917	3,21,183	63,730	6,85,928	27,444	3,64,854	248,197	23,80,933
		INCREASE	435	18,706	...	...	...	...	7,704	10,914	6,740	25,386	...	...	...	...	8,393	...
		DECREASE	...	...	1,451	6,955	1,141	18,307	...	...	...	...	1,938	42,354	1,956	33,969	...	45,577

DIX 17—*continued.*

earnings therefrom during the calendar year 1904.

VII. Fodder						VIII.		IX.—*(continued on following page).* Grain and Pulse								Number.
(1) Oil-cake.		(2) Hay, straw and grass.		Total.		Fruits and vegetables, fresh.		(1) Gram and pulse.		(2) Jawar and Bajra.		(3) Rice in the husk.		(4) Rice not in the husk.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
1,603	3,059	19	56	1,622	3,115	7,262	17,389	4,164	9,421	...	...	1,863	3,308	3,714	8,913	1
5,304	21,773	3,970	14,142	9,274	35,914	8,999	62,056	63,009	4,37,235	1,140	4,203	46,320	1,56,507	280,628	19,12,852	2
7,814	56,691	59,305	3,05,360	67,119	3,62,051	21,372	1,21,107	64,170	3,56,665	43,044	1,45,831	6,110	23,945	39,873	3,17,894	3
7,038	15,861	16,432	64,655	23,460	80,016	7,421	32,237	59,935	2,30,175	...	...	98,185	3,54,304	89,476	2,62,217	4
32,490	1,50,638	18,730	92,068	51,210	2,42,706	11,547	1,46,401	281,400	18,46,897	6,178	19,127	34,027	79,976	167,015	5,94,150	5
10,967	63,542	41,014	2,53,540	52,001	3,17,082	23,037	1,84,491	176,964	18,11,487	199,766	20,72,693	1,382	4,703	125,143	9,62,274	6
11,438	49,998	3,014	17,920	14,452	67,818	16,581	1,25,862	109,044	5,97,446	42,123	126,968	101,929	4,50,466	185,291	8,78,867	7
1,003	6,546	3,196	6,916	4,199	13,462	2,826	25,059	15,643	68,689	46,464	1,93,950	546	3,541	28,170	1,76,309	9
8,883	37,805	34,846	1,28,242	43,728	1,66,047	26,391	2,00,063	213,396	14,65,966	146,572	8,22,701	22,491	62,361	136,007	8,50,749	10
3,920	15,895	10,768	31,374	14,685	47,259	12,992	46,637	91,043	2,91,553	7,084	21,500	2,552	9,477	34,891	1,53,250	11
1,886	9,386	825	3,339	2,711	12,725	1,426	8,341	4,040	24,976	...	...	1,312	3,881	55,733	2,42,201	12
7,118	25,609	6,854	88,329	13,973	1,09,938	2,457	11,825	86,831	3,55,855	945	3,571	51,141	1,61,477	210,023	9,23,277	13
16	94	79	290	95	374	115	597	5,314	12,447	...	...	1,393	1,954	10,289	18,555	14
585	3,645	335	1,118	920	4,763	4,398	22,398	5,615	16,300	32,837	76,990	105	233	13,207	53,765	15
2,461	15,235	847	2,467	3,308	15,702	26,013	1,82,030	23,174	1,66,742	2,017	15,728	631,504	29,61,540	62,692	2,91,351	16
10	3	...	...	10	3	...	...	450	125	...	...	50	15	53	15	17
...	...	...	...	...	...	...	...	1,724	12,468	...	...	...	...	15,706	79,523	18
864	3,966	71	242	935	4,208	121	1,164	8,092	51,563	6,157	24,659	454	4,393	15,024	86,516	9
67	162	2,608	5,885	2,675	6,047	1,031	5,611	3,917	47,212	58,693	3,66,699	2,073	7,723	29,730	1,32,300	19
329	1,001	24	129	353	1,130	589	2,089	2,203	4,897	173	472	7,730	11,281	27,590	50,371	7
6,066	22,862	4,015	13,847	10,131	36,709	23,862	1,47,148	99,016	10,23,976	67,760	7,57,958	3,943	20,189	59,831	4,37,182	8
343	1,015	2,703	16,180	3,051	17,195	3,946	28,916	19,569	43,976	3,148	8,406	4,064	12,715	9,191	16,932	20
34,912	1,39,153	458	1,622	35,370	1,40,774	35,425	1,91,053	64,042	3,31,319	9,107	53,031	101,976	3,64,705	117,493	3,93,716	21
9,518	44,681	3,206	34,246	13,024	78,927	10,023	50,021	64,390	3,28,106	49,385	2,23,586	26,743	1,08,515	60,901	4,34,826	22
...	3	5	11	5	14	85	533	380	1,234	333	673	...	2	579	2,345	23
11	27	...	...	11	27	27	76	7,249	15,534	9,073	19,348	64	188	1,176	2,497	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
2	5	...	...	2	5	171	780	793	1,609	1,309	3,177	43	104	530	1,191	31
38	41	2	3	40	43	69	46	935	658	1	1	789	546	1,271	1,076	2
...	...	...	...	...	...	...	...	394	717	...	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,465	1,651	...	...	1,465	1,651	1,434	1,155	29	32	...	...	2,175	1,697	57	62	33
588	1,695	...	...	588	1,695	...	...	292	1,385	...	...	...	...	350	1,536	34
3	53	109	1,558	112	1,611	154	3,446	549	6,549	43	496	1	10	281	4,674	29
4	51	186	3,068	190	3,119	169	3,633	1,530	20,534	...	...	16	131	11,934	1,44,187	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
187,105	6,99,514	2,13,633	10,71,006	3,70,738	17,61,120	251,661	16,22,167	1,455,187	86,32,745	741,327	49,61,006	1,149,941	48,06,893	1,792,836	94,23,494	
156,961	6,91,973	1,93,525	12,12,117	3,50,506	19,03,090	243,117	15,96,279	1,356,589	91,46,452	634,429	39,11,068	9,25,388	36,76,981	1,675,849	84,41,396	
124	...	20,108	...	20,232	...	8,441	25,893	108,598	4,36,293	106,898	10,49,940	224,553	11,31,911	116,969	9,82,098	
...	3,550	...	1,40,511	...	1,43,870	...	...	...	...	...	...	...	...	...	...	

APPEN

Principal commodities carried by railways and the

Number.		Railway system *vide* Appendix I.	IX. GRAIN AND PULSE—concld.								Hides	
			(5) Wheat.		(6) Wheat flour.		(7) Other.		Total.		(a) Dressed or tanned.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5' 6" gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	8	23	302	904	20	23	10,091	22,591	...	...
2	(a), (b) & (d)	Bengal-Nagpur	73,183	5,64,750	3,833	22,667	3,638	10,993	472,672	31,09,207	...	...
3	(a), (c) to (f) & (m) & (n)	Bombay, Baroda and Central India	109,634	7,23,841	5,757	43,222	29,422	1,90,267	297,999	18,00,665	227	1,280
4	...	Eastern Bengal State	3,075	9,002	9,798	1,29,741	731	2,411	261,200	9,87,850	23,138	66,399
5	...	East Indian	759,162	46,46,310	35,938	2,31,980	59,380	2,86,339	1,322,080	79,04,779	451	4,132
6	...	Great Indian Peninsula	340,934	40,66,547	17,628	1,86,863	10,955	1,05,586	871,562	93,10,153	449	7,133
7	(a) to (c)	Madras	1,578	7,699	3,357	18,354	47,123	2,09,730	499,535	23,49,520	2,220	36,010
9	(a) & (b)	Nizam's Guaranteed State	4,579	24,314	1,391	7,997	879	3,677	97,672	4,78,576	...	5
10	...	North Western State	1,477,470	3,09,64,554	47,743	1,95,730	36,522	2,78,328	2,080,201	2,46,40,416	109	1,138
11	...	Oudh and Rohilkhand State	432,020	21,41,567	10,995	40,823	36,196	1,45,163	615,681	19,03,341	...	...
		3' 3½" gauge.										
12	...	Assam-Bengal	1	5	1,511	9,890	38	135	63,635	2,80,791	...	...
13	...	Bengal and North-Western	26,643	6,31,186	3,536	20,080	101,156	4,08,560	550,271	25,04,006	1	3
14	...	Bengal-Dooars	4	12	439	1,780	355	718	17,794	35,466	...	...
15	...	Bhavnagar-Gondal-Junagad-Porbandar	1,391	27,918	196	866	9,565	37,616	62,919	2,06,906	17	133
16	...	Burma	1,396	7,007	6,284	55,589	3,464	27,339	730,831	35,25,202	51	566
17	...	Deoghur	95	30	55	16	...	...	703	201	...	...
18	...	Dibru-Sadiya	...	...	...	...	427	3,016	17,857	94,997	...	...
9	(c)	Hyderabad-Godavari Valley	5,969	29,910	294	2,533	887	5,992	36,967	2,05,555	...	3
19	...	Jodhpur-Bikaner	41,723	1,84,895	754	3,225	12,751	70,208	154,641	7,92,321	14	127
7	(d) & (e)	Madras	47	242	646	4,858	3,647	20,343	43,036	92,404	7	39
3	(b) & (g) to (l)	Rajputana-Malwa	178,549	14,56,963	9,078	68,425	63,097	4,11,453	499,864	41,65,046	100	867
20	(a) & (b)	Rohilkund and Kumaon	78,217	1,46,180	1,217	3,566	12,679	33,577	122,245	2,65,342	...	...
21	...	South Indian	1,050	4,163	1,762	10,637	11,329	44,780	306,758	12,02,396	860	7,918
22	...	Southern Mahratta	17,676	1,19,860	4,737	52,517	21,400	1,15,505	244,232	13,81,935	89	1,456
23	...	Udaipur-Chitor	633	2,416	19	117	731	2,121	2,654	6,906	...	1
		2' 6" gauge.										
25	...	Barsi Light	7,579	15,672	5	15	53	124	25,018	53,378	...	...
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	2,025	4,361	37	129	1,906	4,452	6,643	15,022	3	6
2	(c)	Parlakimedi Light	17	11	2	3	480	336	3,495	2,621	...	...
20	(c)	Powayan Light	1,969	2,590	...	...	967	1,711	3,329	5,018	...	...
...	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	33	86	...	...	2,314	1,877	...	...
34	...	Tezpur-Balipara	...	...	...	...	...	...	642	2,921	...	...
39	...	Kalka-Simla	190	2,396	604	7,674	540	6,013	2,108	27,612	...	4
		2' 0" gauge.										
36	...	Darjeeling-Himalayan	3	51	1,197	28,898	414	6,453	15,094	1,97,283	...	14
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...
		Total 1904	3,647,360	3,00,64,329	169,668	11,45,474	470,022	24,67,399	9,425,243	8,86,78,340	28,336	1,47,331
		Total 1903	2,469,553	2,36,87,705	161,397	10,55,834	533,114	28,52,417	7,756,318	5,27,71,853	6,150	66,404
		Increase	1,177,908	1,23,76,624	7,271	89,640	...	...	1,679,025	1,57,01,497	23,186	79,927
		Decrease	...	...	...	...	63,092	3,65,019	...	...	...	...

DIX 17—*continued.*

earnings therefrom during the calendar year 1904.

X. HIDES AND SKINS.								XI.		XII.		XIII. JUTE.						Number.
(1) Of cattle.		(2) Skins of sheep and other animals.				Total.		Horns.		Hemp (Indian) and other fibres, excluding jute.		(1) Raw.		(2) Gunny bags and cloth.		Total.		
(a) Raw.		(b) Dressed or tanned.		(c) Raw.														Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
462	2,964	...	...	100	693	562	3,657	...	...	337	1,417	102,626	4,14,575	240	1,178	103,066	4,16,053	1
9,129	61,301	...	...	...	...	9,129	61,301	427	3,461	6,219	43,360	...	...	21,714	1,09,163	21,714	1,09,163	2
3,106	27,007	2	155	1,966	21,325	4,310	49,767	266	3,084	1,104	12,900	304	2,010	9,031	63,263	9,335	65,272	3
...	...	1,909	10,362	...	...	25,067	96,761	169	725	1,368	7,264	712,118	46,33,434	19,134	77,574	731,253	49,10,998	4
24,463	3,59,192	239	4,246	13,388	2,06,948	39,036	5,72,530	519	6,516	23,621	1,70,253	125,114	6,39,188	67,990	10,56,294	193,104	16,95,482	5
3,335	46,712	15	333	6,228	69,672	13,127	1,43,649	1,252	18,053	13,150	1,38,629	393	7,118	27,991	2,86,764	28,387	2,93,882	6
4,803	41,790	5,538	65,414	31,019	1,62,599	34,180	3,25,783	437	3,640	5,524	25,289	302	1,478	15,494	1,10,301	15,796	1,11,779	7
390	4,293	4	55	2,136	21,767	2,530	26,119	234	1,533	153	1,136	9	89	3,226	24,997	3,235	25,086	9
10,199	1,15,121	61	860	11,120	1,21,639	21,489	2,38,998	373	3,603	647	5,425	32	383	50,748	3,84,345	50,780	3,84,728	10
6,272	38,963	3	5	3,579	17,158	9,853	56,125	496	1,787	6,689	19,444	117	726	15,000	82,348	15,117	83,074	11
619	6,938	...	...	18	121	637	6,959	11	122	59	192	68,967	1,46,300	1,045	5,237	70,012	1,51,537	12
7,078	54,937	14	146	3,240	21,555	10,333	76,641	156	1,196	251	1,693	2,073	13,329	19,927	1,18,498	22,000	1,31,727	13
166	692	...	...	...	...	166	692	...	...	...	...	11,677	29,815	23	40	11,699	29,855	14
451	2,939	34	211	316	1,703	819	5,085	4	23	6	36	1	3	2,045	7,033	2,[illegible]	7,084	15
3,057	19,195	10	135	33	237	3,150	20,123	22	331	...	...	38	809	13,493	49,138	13,532	49,944	16
...	...	...	...	...	...	...	...	...	...	50	15	...	...	40	13	40	13	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
137	1,456	...	12	513	5,877	648	7,346	27	423	45	454	1	4	2,052	17,351	2,053	17,355	9
920	6,461	4	30	845	5,816	1,763	14,434	1	7	39	92	21	136	2,814	10,682	2,835	10,818	19
93	341	97	379	503	1,699	699	2,459	3	5	148	603	...	6	705	2,283	705	2,289	7
2,247	43,132	16	167	2,939	44,077	7,303	97,347	255	3,516	1,670	11,741	819	4,515	13,388	83,341	13,907	87,856	3
932	4,304	...	...	506	2,174	1,440	6,478	80	480	1,597	5,996	4	15	2,274	9,723	2,278	9,738	20
2,463	14,967	1,413	20,738	4,679	27,851	9,415	71,473	153	1,322	2,452	27,572	42	137	11,586	54,860	11,628	54,997	21
1,200	9,768	69	353	7,017	49,593	8,405	61,172	302	2,968	3,617	20,066	1	7	11,533	73,045	11,534	73,052	22
38	150	2	5	69	500	129	656	...	3	10	49	...	1	114	470	114	471	23
6	16	...	...	57	219	103	235	4	11	23	65	...	...	1,127	2,668	1,127	2,668	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
126	495	...	1	49	205	177	707	1	5	27	138	...	...	129	453	129	453	31
458	394	...	...	...	...	458	394	...	1	...	...	...	...	62	63	62	63	2
...	...	...	...	...	...	...	...	...	...	461	991	...	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	46	...	...	...	...	25	46	...	...	...	...	921	1,071	...	...	921	1,071	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
1	16	...	7	3	34	4	61	...	6	9	136	...	12	86	1,353	86	1,364	29
209	2,659	...	...	4	64	213	2,757	8	155	...	...	13	275	198	2,633	211	2,908	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
91,966	9,86,102	9,485	1,03,910	82,962	9,22,493	203,766	19,59,730	5,200	53,665	67,156	4,95,378	1,025,693	60,96,622	314,201	27,24,127	1,339,894	88,20,749	
96,766	9,71,188	7,950	1,01,679	77,961	7,53,779	183,949	17,94,950	5,141	49,927	75,766	6,09,669	934,846	55,03,204	268,034	22,22,933	1,202,880	77,91,137	
...	14,914	1,535	2,231	6,000	68,704	14,919	1,64,778	59	4,738	...	...	90,847	5,28,418	46,167	5,01,194	1,36,614	10,29,612	
14,902	...	...	...	...	...	...	...	...	...	6,610	1,13,210	...	...	...	...	...	...	

Principal commodities carried by railways and the earnings

Numbers.		Railway system *vide* Appendix 1.	XIV.		XV.									
					LEATHER.									
			Lac.		(1) Unwrought.		(2) Wrought, excepting boots and shoes.		Total.		(1) Ale and beer.		(2) Wines and spirits of all kinds including country spirit.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.												
1	...	Bengal Central	...	...	...	...	1	1	1	1	1	3	41	399
2	(a) (b) & (d)	Bengal-Nagpur	9,199	63,405	1,014	7,576	...	...	1,014	7,576	963	3,203	859	8,946
3	(a) (c) to (f) & (m) & (n).	Bombay, Baroda and Central India	68	693	876	13,388	841	14,314	1,717	27,702	1,418	17,389	3,076	26,989
4	...	Eastern Bengal State	1,211	7,946	9	112	4	35	13	147	545	6,088	1,054	14,788
5	...	East Indian	21,603	2,89,906	1,068	49,272	542	9,109	1,606	58,381	7,115	67,671	2,239	73,135
6	...	Great Indian Peninsula	907	9,325	794	12,711	1,072	25,727	1,866	38,438	10,476	1,52,615	5,209	97,645
7	(a) to (c)	Madras	113	1,473	1,114	11,618	396	8,272	1,509	20,090	3,388	27,583	5,401	46,978
9	(a) & (b)	Nizam's Guaranteed State	12	150	918	13,105	157	1,585	1,075	14,690	1,708	15,451	278	4,112
10	...	North-Western State	1,055	17,853	2,033	39,096	978	25,978	3,011	65,074	8,679	98,699	5,655	1,43,835
11	...	Oudh and Rohilkhand State	769	3,321	34	256	147	957	181	1,213	6,545	22,878	2,528	34,956
		3′ 3½″ gauge.												
12	...	Assam-Bengal	1,059	6,516	...	...	7	77	7	77	60	526	195	2,171
13	...	Bengal and North-Western	2,903	16,898	102	396	102	1,089	204	1,485	51	392	258	2,732
14	...	Bengal-Dooars	6	140	...	...	...	...	...	...	...	...	2	11
15	...	Bhavnagar-Gondal-Junagad-Porbandar	16	62	211	1,165	50	333	261	1,488	24	162	173	1,758
16	...	Burma	1,286	19,496	62	1,118	51	1,074	133	2,192	2,882	26,347	715	11,214
17	...	Deoghur	110	35	...	...	...	...	...	...	...	...	...	...
18	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	105	1,201	...	...
9	(c)	Hyderabad-Godavari Valley	14	135	8	147	56	880	64	1,027	10	58	62	597
19	...	Jodhpur-Bikaner	389	1,886	242	1,659	216	1,523	458	3,181	73	863	96	1,201
7	(d) & (e)	Madras	1	7	...	1	1	3	1	4	1,002	4,137	186	1,693
3	(b) & (g) to (l)	Rajputana-Malwa	469	5,227	1,327	17,011	314	6,633	1,641	23,644	2,142	17,338	1,270	19,047
20	(a) & (b)	Rohilkund and Kumaon	249	1,259	2	15	28	260	30	275	1,079	5,742	178	2,270
21	...	South Indian	226	1,230	3	26	26	347	29	373	296	2,193	4,181	30,755
22	...	Southern Mahratta	29	180	401	4,001	440	3,956	931	7,957	1,273	9,873	3,125	23,259
23	...	Udaipur-Chitor	3	14	55	236	2	22	57	258	1	5	4	39
		2′ 6″ gauge.												
25	...	Barsi Light	...	1	...	...	6	20	6	20	...	1	5	10
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	8	26	...	...	39	198	39	198	3	11	3	25
2	(c)	Parlakimedi Light	...	1	...	...	...	...	...	...	1	1	63	38
20	(c)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...
...	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...
34	...	Tezpur-Balipara	...	...	...	...	...	...	...	...	...	...	23	153
29	...	Kalka-Simla	2	42	10	237	10	276	20	513	1,437	9,262	196	2,980
		2′ 0″ gauge.												
36	...	Darjeeling-Himalayan	3	59	...	5	6	173	6	178	901	9,903	168	5,063
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1904	41,612	4,45,208	10,983	1,73,380	5,497	1,02,732	16,480	2,76,062	53,150	5,09,409	36,663	5,56,596
		TOTAL 1903	42,501	4,95,790	8,119	1,23,353	6,962	1,23,420	14,981	2,44,773	47,839	4,53,720	33,188	5,27,709
		INCREASE	...	...	2,864	50,027	...	...	1,499	31,309	5,311	55,779	3,475	28,887
		DECREASE	889	50,582	...	...	1,365	19,688	...	...	...	...	...	...

DIX 17—*continued.*

therefrom during the calendar year 1904.

XVI				XVII—(contd. on following page).														Number.
LIQUORS.				METALS.														
(3) All other sorts, including toddy and fermented liquor other than ale and beer.		Total.		(1) Brass, unwrought.		(2) Brass, wrought.		(3) Copper, unwrought.		(4) Copper, wrought.		(5) IRON AND STEEL.						
												(a) Cast.		(b) Unwrought.		(c) Wrought.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
...	...	42	402	19	93	537	1,369	...	...	40	64	189	349	...	...	1,169	3,112	1
...	...	1,942	12,048	...	...	1,473	15,429	...	...	264	2,033	579	5,057	...	...	16,228	68,691	2
420	2,439	4,814	46,717	1,815	25,356	864	11,753	1,094	16,716	414	6,300	2,253	24,114	474	5,987	22,738	2,50,990	3
...	...	1,599	20,676	364	3,573	2,202	20,868	129	1,113	229	2,447	687	4,264	9	21	26,376	1,79,007	4
374	3,278	9,728	1,44,084	1,741	22,173	7,421	85,585	450	13,041	922	23,251	13,697	1,35,902	33,007	62,628	51,133	5,89,963	5
183	966	15,819	2,51,226	9,882	77,761	5,577	49,706	1,995	34,618	1,315	24,457	2,963	40,493	19,196	2,90,445	36,223	6,11,646	6
3,144	10,334	11,933	94,795	1,112	9,809	909	9,137	126	1,563	185	1,970	1,740	12,799	1,813	8,849	16,538	1,56,823	7
2,734	11,262	4,720	30,825	144	1,110	193	1,924	152	999	81	851	207	2,077	2,743	19,879	1,524	16,170	9
293	3,218	13,937	2,45,753	895	10,130	1,995	128,973	320	4,653	994	16,376	2,483	38,396	1,318	10,734	40,435	7,99,629	10
...	...	9,073	57,834	94	577	3,797	26,211	64	511	271	2,441	1,596	9,163	...	...	13,578	77,444	11
...	...	255	2,667	...	...	291	2,080	...	...	11	74	61	383	...	...	2,556	17,251	12
...	...	309	3,124	102	913	1,942	17,209	3	28	119	1,300	1,042	5,004	198	931	6,938	40,143	13
...	...	2	11	...	...	...	...	...	...	...	...	19	37	...	...	999	3,560	14
...	...	197	1,920	289	779	293	1,930	122	460	129	975	155	830	310	1,574	1,473	9,175	15
30	464	3,636	38,025	31	463	314	4,868	77	900	96	1,039	366	4,179	37	258	6,606	56,262	16
...	...	...	...	15	4	22	7	...	...	...	...	100	33	30	24	30	10	17
...	...	105	1,201	...	...	...	...	...	...	...	...	1,964	16,407	...	...	...	...	18
400	2,161	472	2,836	4	34	83	911	2	25	16	299	41	447	123	1,152	2,013	20,311	9
7	63	179	2,132	70	349	153	1,900	28	299	96	647	33	183	85	401	2,867	15,735	19
15	179	1,203	5,908	2	4	5	57	6	10	5	25	50	278	192	975	407	1,673	7
1,111	8,383	4,523	44,769	1,994	46,065	1,782	19,314	1,100	37,050	404	4,121	1,538	13,623	1,467	9,217	17,645	1,91,477	8
3	23	1,260	8,035	55	228	366	2,009	3	29	74	499	76	502	147	673	3,079	15,769	20
867	3,961	5,344	38,909	1,429	9,866	1,014	10,963	205	1,436	95	1,223	754	14,164	2,104	10,889	10,049	82,356	21
4,153	16,341	8,600	49,472	307	4,424	1,105	10,691	332	4,135	950	7,068	1,369	19,074	5,939	36,100	7,792	68,551	22
...	...	5	44	6	53	4	26	1	7	2	14	9	49	2	12	113	729	23
...	...	5	11	3	7	29	85	...	...	20	57	...	1	185	389	1,004	2,284	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
15	135	21	171	1	6	29	140	...	2	10	43	7	33	1	6	266	1,224	31
...	...	64	39	...	...	4	7	...	...	...	...	...	...	...	...	66	45	2
...	...	...	...	...	...	...	...	...	...	...	...	164	265	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	...	23	153	...	...	...	...	45	337	...	...	...	...	...	...	...	...	34
23	204	1,556	12,446	5	105	21	401	1	33	13	237	10	390	20	478	222	4,106	29
...	...	1,069	14,806	...	...	56	1,381	...	...	28	705	77	1,909	...	...	420	9,933	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
13,681	63,231	102,494	11,29,326	14,376	2,21,810	29,513	3,24,234	6,265	1,06,736	6,563	99,495	34,344	3,51,110	69,321	4,51,891	301,455	33,15,327	
9,416	44,596	90,443	10,25,968	13,798	2,12,170	28,547	3,19,024	5,171	90,233	5,695	1,00,362	32,735	3,56,305	60,201	3,60,267	286,410	28,87,279	
4,265	18,635	12,051	103,331	578	9,640	966	5,210	1,094	16,513	867	...	1,609	...	19,120	91,324	35,045	4,28,048	
...	...	...	...	...	...	...	...	...	...	...	767	...	5,195	...	...	...	...	

Principal commodities carried by railways and

Numbers.		Railway system *vide* Appendix I.	XVII. Metals—*concluded.*						XVIII. Oils.							
			(5) Iron and steel—*concluded.* (d) Manufactures.		(6) Others.		Total.		(1) Kerosine.		(2) Castor.		(3) Cocoanut.		(4) Mustard and rape.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	65	353	2,373	5,806	4,396	11,145	2,399	5,416	13	38	187	332	1,159	2,997
2	(a), (b) & (d).	Bengal-Nagpur	2,052	30,745	155,660	2,76,246	178,195	4,20,819	23,166	2,33,158	1,463	11,581	1,069	7,230	...	...
3	(a), (c) to (f), & (m) & (n)	Bombay, Baroda and Central India	9,916	141,558	11,197	77,375	50,765	5,59,049	13,500	1,46,830	1,090	8,746	718	9,634	337	1,254
4	...	Eastern Bengal State	5,954	38,225	2,756	19,374	38,706	2,66,982	145,753	3,15,046	206	755	999	8,375	4,489	35,332
5	...	East Indian	17,726	2,09,909	6,737	1,26,879	133,057	12,64,439	83,494	8,13,648	2,809	20,933	1,961	16,458	4,396	40,845
6	...	Great Indian Peninsula	12,400	2,48,592	85,740	6,76,894	166,261	20,54,582	46,351	6,64,513	1,165	12,011	2,593	41,490	37	651
7	(a) to (c)	Madras	15,379	1,42,876	3,345	23,904	41,146	3,69,729	28,268	2,04,332	4,959	19,103	3,151	25,419	27	161
9	(a) & (b)	Nizam's Guaranteed State	1,135	11,985	733	8,093	6,912	63,067	4,204	33,810	668	5,804	116	1,719	1	15
10	...	North Western State	10,586	1,95,978	5,097	70,112	73,013	11,74,811	20,317	3,75,809	392	5,056	712	10,000	2,656	30,049
11	...	Oudh and Rohilkhand State	3,600	24,175	927	4,298	24,027	1,44,820	17,433	94,421	152	839	65	535	967	4,249
		3′ 3½″ gauge.														
12	...	Assam-Bengal	2,150	20,542	1,229	13,196	6,298	53,505	15,991	82,529	25	286	54	473	832	7,545
13	...	Bengal and North Western	5,228	35,960	2,596	20,385	18,138	1,21,873	16,939	77,359	352	2,326	154	1,218	413	3,485
14	...	Bengal-Doosrs	135	557	402	1,902	1,446	6,036	1,918	7,077	...	...	...	...	314	1,607
15	...	Bhavnagar-Gondal-Junagad-Porbandar.	774	4,547	280	1,519	3,824	21,779	3,844	16,310	210	1,602	101	490	111	209
16	...	Burma	7,463	73,427	240	3,042	15,233	1,41,397	8,749	72,674	101	1,165	761	8,128	1	11
17	...	Deoghur	...	...	...	...	247	77	109	32	10	3	6	2	10	3
18	...	Dibru-Sadiya	...	...	309	7,523	2,273	23,930	8,008	18,528	...	...	...	...	...	...
9	(c)	Hyderabad-Godavari Valley	358	5,068	223	6,314	2,868	34,561	1,527	11,459	120	1,064	120	1,195	2	23
19	...	Jodhpur-Bikaner	580	5,590	195	1,328	4,108	24,222	577	2,507	275	2,797	33	148	5	46
7	(d) & (e)	Madras	656	4,901	65	449	1,387	8,870	1,027	4,132	4	13	307	1,084	...	...
3	(b) & (g) to (l)	Rajputana-Malwa	4,466	72,237	11,572	69,948	41,968	4,48,231	8,687	74,400	1,044	7,304	401	8,417	289	2,576
20	(a) & (b)	Rohilkund and Kumaon	233	1,591	280	1,477	4,313	22,777	1,989	6,219	48	162	7	32	55	324
21	...	South Indian	5,962	76,807	2,079	13,728	23,709	2,21,372	22,156	1,50,711	4,530	30,118	1,355	6,962	82	776
22	...	Southern Mahratta	4,351	42,587	970	11,210	23,637	2,10,840	25,814	1,62,332	731	3,993	1,499	9,474	...	1
23	...	Udaipur-Chitor	43	239	35	210	214	1,339	133	677	6	36	3	17	...	1
		2′ 6″ gauge.														
25	...	Barsi Light	238	610	8	23	1,457	3,425	351	857	9	22	61	215	...	...
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	141	346	54	330	509	2,630	123	374	23	59	11	43	5	13
2	(c)	Parlakimedi Light	6	7	6	8	32	67	175	117	2	2	5	5	...	...
20	(c)	Powayan Light	...	...	...	...	164	365	...	...	...	...	...	...	...	...
...	...	Ranaghat Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	43	59	193	275	...	...	...	...
34	...	Tezpur-Balipara	...	...	...	...	45	337	...	...	...	...	...	...	...	...
29	...	Kalka-Simla	239	4,807	32	719	569	11,075	199	4,922	3	76	...	11	9	291
		2′ 0″ gauge.														
36	...	Darjeeling-Himalayan	486	10,949	59	1,497	1,136	26,174	838	12,961	3	57	4	100	448	6,566
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...A	...	...	...	...	...	...	...	...
		TOTAL 1904	112,312	14,10,766	2,95,643	14,87,778	869,781	77,18,846	506,663	35,42,031	20,605	134,146	16,426	1,59,226	16,635	1,39,020
		TOTAL 1903	98,989	13,72,137	303,502	15,42,229	805,048	72,40,576	459,191	32,57,858	18,748	1,06,534	16,094	1,75,741	22,456	1,56,582
		INCREASE	13,323	38,629	...	...	64,733	4,78,270	47,472	2,84,163	1,857	27,612	...	...	...	...
		DECREASE	...	...	7,959	1,04,451	...	...	...	...	...	...	268	16,515	5,921	17,562

DIX 17—*continued.*

the earnings therefrom during the calendar year 1904.

XIX (continued on following page).																		Numbers.
				Oil-seeds.														
(5) Others.		Total.		(1) Castor.		(2) Earthnuts.		(3) Linseed.		(4) Poppy.		(5) Rape and mustard.		(6) Til or jinjili.		(7) Cotton seed.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
17	40	3,655	8,903	...	...	...	...	1,769	4,156	...	...	4,187	8,942	...	...	...	...	1
2,219	15,417	27,907	3,66,396	2,600	13,745	...	...	16,791	1,44,430	...	...	9,345	68,183	40,695	4,13,970	...	...	2
4,242	39,009	19,797	2,05,473	25,915	2,01,200	1,075	12,384	16,090	1,55,709	19,807	1,60,344	41,999	3,04,613	27,565	2,14,310	...	...	3
607	2,250	1,53,054	3,63,360	506	617	...	...	23,051	72,331	...	...	28,298	1,03,216	214	776	...	...	4
2,668	29,454	95,238	9,30,338	32,136	3,39,359	194	1,236	3,18,629	23,33,461	40,280	3,95,367	188,038	13,72,901	19,864	1,40,347	20,849	1,23,256	5
13,591	1,47,084	63,737	6,85,749	38,233	3,56,980	6,733	37,347	2,09,983	23,43,483	23,507	3,23,472	74,952	10,10,038	113,488	12,84,272	117,255	12,25,494	6
8,162	44,532	44,567	2,92,567	44,453	1,39,794	4,415	18,060	439	1,095	45	370	1,224	10,012	42,054	2,06,330	...	...	7
584	5,653	5,573	46,998	64,710	3,71,348	80	501	10,639	24,205	149	790	55	339	18,797	1,31,892	...	...	9
3,949	42,527	28,026	4,63,441	66	322	170	2,419	2,616	32,198	979	6,849	66,166	7,18,480	21,035	1,26,997	67,032	3,55,067	10
597	3,602	19,214	1,03,846	3,852	14,732	74	563	35,075	1,28,740	21,613	90,162	35,237	1,47,229	5,289	24,322	...	...	11
228	1,628	17,120	63,661	25	49	...	...	410	662	...	1	638	1,850	522	1,358	24	120	12
374	2,774	20,232	87,162	3,602	10,160	2	8	148,605	6,90,292	4,928	22,547	41,773	2,19,822	509	2,321	...	...	13
...	...	2,232	8,684	...	...	...	...	...	...	...	...	1,057	1,456	...	...	...	...	14
695	2,599	4,961	20,610	5,032	17,371	337	2,275	4	10	250	549	904	1,945	3,822	12,396	...	...	15
10,223	75,825	19,836	1,57,803	23	156	1,266	9,575	3	26	...	2	4	29	6,150	43,570	...	...	16
100	33	226	73	25	8	...	...	15	5	10	4	40	12	6	3	...	...	17
...	...	8,008	18,528	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
1,236	11,903	2,805	25,044	663	3,807	29	196	37,017	2,44,959	40	312	27	210	1,684	9,633	9,939	61,411	9
776	5,390	1,659	10,688	...	...	13	58	18	92	6	29	3,503	16,428	18,344	90,379	...	...	19
816	2,286	2,154	7,515	7	25	20	92	...	...	...	...	1	2	341	587	...	...	7
2,206	22,820	12,627	1,16,517	20,522	54,261	437	4,838	18,169	1,15,896	22,258	1,07,066	46,470	406,982	29,160	137,789	...	...	8
121	954	2,200	7,711	2,345	5,935	13	116	8,489	18,806	2,268	3,272	9,787	35,442	601	1,537	...	...	20
16,707	35,735	44,629	2,04,302	10,244	42,366	134,232	2,23,122	3	12	38	336	1,639	8,156	33,164	1,97,976	...	...	21
5,407	31,713	33,445	2,07,515	10,027	57,665	4,255	21,720	14,101	1,15,524	467	4,507	440	2,689	21,525	151,800	51,709	2,90,055	22
3	23	145	764	...	...	4	29	18	47	220	1,965	5	22	260	574	...	...	23
317	832	758	1,926	306	654	114	273	8,657	18,436	20	46	147	329	400	863	2,333	4,983	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
172	633	333	1,122	...	...	16	70	...	...	7	18	...	...	1,683	3,510	368	856	31
2	2	184	126	40	30	...	...	...	...	...	...	48	35	119	71	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	401	575	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	236	334	...	...	...	...	...	...	...	...	245	334	...	...	...	...	33
35	225	35	225	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
9	204	210	5,504	...	...	...	...	1	18	...	...	...	1	...	6	5	68	29
31	701	1,324	20,285	...	...	...	...	1	13	...	...	5	129	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
75,088	5,36,240	635,317	45,10,653	2,65,360	14,20,604	153,468	3,54,906	670,623	66,44,226	1,37,092	10,86,007	556,619	44,40,021	406,281	31,87,489	269,554	20,60,310	
59,536	4,58,558	576,625	41,55,373	2,72,016	15,55,629	185,167	3,92,379	667,839	49,06,376	1,33,716	10,96,286	560,220	41,41,084	451,113	38,07,494	301,708	24,11,826	
15,552	77,662	58,692	3,55,380	...	...	...	...	202,684	17,35,950	4,376	...	...	2,96,537	...	...	...	...	
...	...	...	...	6,656	1,35,926	31,699	37,472	...	...	...	13,279	3,601	...	44,832	6,20,005	32,144	3,51,516	

Principal commodities carried by railways and

Numbers.		Railway system *vide* Appendix I.	XIX				XX		XXI		XXII			
			Oil-seeds—*concld.*										Provi	
			(8) Others.		Total.		Opium.		Paper and pasteboard.		(1) Dried fruits and nuts.		(2) Ghee.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	6	15	5,063	13,113	3	23	114	734	184	545	53	208
2	(*a*), (*b*) & (*d*)	Bengal-Nagpur	11,760	57,474	81,181	6,96,202	53	1,655	2,204	34,956	9,167	73,296	4,292	56,252
3	(*a*), (*c*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India.	7,734	21,396	139,625	11,29,158	2,022	71,066	2,907	28,507	19,113	2,11,725	6,161	66,074
4	...	Eastern Bengal State	414	1,782	52,483	1,78,723	9	60	9,926	10,168	289	1,716	995	14,050
5	...	East Indian	18,043	98,646	638,033	44,94,875	8,834	2,14,437	10,252	1,87,758	6,555	95,135	19,730	4,00,535
6	...	Great Indian Peninsula	36,064	4,15,206	620,214	72,15,314	664	30,900	2,966	51,965	42,288	6,45,096	18,008	2,45,560
7	(*a*) to (*c*)	Madras	38,834	3,27,830	131,454	6,03,511	76	1,872	2,497	26,341	17,085	61,656	5,770	50,343
9	(*a*) & (*b*)	Nizam's Guaranteed State	8,743	29,635	103,173	5,58,710	41	1,654	536	6,042	14,050	1,12,349	754	8,248
10	...	North-Western State	73,781	5,73,047	231,845	21,14,369	97	1,237	3,358	56,025	26,592	4,74,013	11,344	1,24,311
11	...	Oudh and Rohilkhand State	13,871	57,910	114,011	4,63,858	1,618	32,037	1,811	11,643	1,946	18,887	4,601	21,226
		3′ 3½″ gauge.												
12	...	Assam-Bengal	58	206	1,077	4,276	10	69	119	663	493	3,285	191	1,631
13	...	Bengal and North-Western	9,315	38,179	208,733	9,83,229	6,645	99,080	1,953	5,809	1,057	13,521	3,372	28,229
14	...	Bengal-Dooars	...	...	1,057	1,456	...	...	...	...	24	58	...	...
15	...	Bhavnagar-Gondal-Junagad-Porbandar.	9,912	35,928	20,268	70,473	12	213	202	1,274	3,115	13,281	1,381	8,802
16	...	Burma	1	11	7,449	53,309	26	1,015	526	7,668	1,490	12,737	1,132	14,469
17	...	Deoghur	48	14	144	46	...	...	...	...	...	...	30	10
18	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	599	5,226	...	...
9	(*c*)	Hyderabad-Godavari Valley	6,160	38,789	55,629	3,59,317	6	339	195	2,704	1,894	19,435	465	5,791
19	...	Jodhpur-Bikaner	9,183	28,607	31,064	1,25,593	29	413	119	1,194	2,893	13,317	4,645	36,591
7	(*d*) & (*e*)	Madras	1,676	3,518	2,015	4,224	1	4	45	314	1	4	198	756
3	(*b*) & (*g*) to (*i*).	Rajputana-Malwa	5,213	30,375	142,229	9,16,837	3,708	62,669	2,015	28,020	12,462	1,63,215	7,881	94,061
20	(*a*) & (*b*)	Rohilkund and Kumaon	19	66	23,523	65,179	185	1,714	114	484	153	1,076	223	1,072
21	...	South Indian	5,113	16,837	183,414	4,88,925	...	...	2,215	41,335	736	4,477	1,364	10,239
22	...	Southern Mahratta	10,371	53,057	112,895	6,97,017	4	71	667	8,076	29,472	2,15,350	6,050	43,555
23	...	Udaipur-Chitor	43	100	1,350	2,797	139	926	32	199	495	2,451	281	1,459
		2′ 6″ gauge.												
25	...	Barsi Light	653	1,390	12,630	26,904	...	...	35	107	600	1,686	36	89
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	341	835	2,415	5,299	9	149	78	448	131	459	109	393
2	(*c*)	Parlakimedi Light	461	356	662	491	...	...	3	3	8	7	1	2
30	(*e*)	Powayan Light	...	...	401	575	...	...	...	...	...	...	...	...
...	...	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	245	334	...	...	...	...	...	...	5	7
4	...	Tezpur-Balipara	5	39	5	39	...	...	...	...	...	...	21	117
29	...	Kalka-Simla	4	56	10	139	4	136	65	1,991	41	794	43	664
		2′ 0″ gauge.												
36	...	Darjeeling-Himalayan	...	...	6	142	...	15	109	2,843	29	708	10	165
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1904	266,825	20,80,390	2,925,732	3,12,74,543	24,193	5,21,353	44,194	5,17,180	193,561	21,65,527	98,537	12,23,929
		TOTAL 1903	190,071	12,93,518	2,760,849	1,96,12,591	25,990	5,44,063	37,183	4,66,664	168,513	19,83,618	88,142	11,36,226
		INCREASE	76,754	7,86,862	164,883	16,61,952	...	...	7,011	50,516	25,048	1,82,909	10,395	87,703
		DECREASE	...	...	...	...	1,797	23,710	...	...	...	...	...	...

DIX 17—*continued.*

the earnings therefrom during the calendar year 1904.

	XXIII														XXIV		Numbers.
SIONS:	RAILWAY PLANT AND ROLLING-STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS.																
(3) Others.		* Total.		(1) Locomotives, engines and tenders and parts thereof.		(2) Carriages and trucks and parts thereof.		(3) Materials.						Total.		Salt.	
								(a) Steel rails and fish-plates.		(b) Sleepers and keys of steel and cast-iron.		(c) Others.					
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
255	1,796	402	2,540	31	13	105	45	...	...	413	189	1,733	1,535	2,287	1,722	4,035	9,407	1
3,821	48,309	17,300	1,77,957	309	2,339	976	4,552	1,039	5,744	1,657	19,827	79,477	4,36,901	83,458	4,69,363	97,053	6,06,113	2
20,904	1,48,437	46,268	4,26,236	67	790	221	851	20,659	96,127	40	227	25,233	73,054	46,260	1,70,049	158,202	5,05,453	3
10,796	85,813	12,079	1,01,579	677	235	956	812	331	141	1,299	1,723	18,691	20,542	21,993	23,441	74,636	3,66,906	4
79,285	8,64,160	105,570	13,59,830	769	6,956	15,234	28,697	36,986	2,39,403	470	649	175,989	4,85,530	231,446	7,61,325	237,004	11,30,725	5
41,965	4,09,845	102,161	13,00,533	291	772	37	1,104	12,388	1,19,103	3,625	24,046	14,537	77,477	30,878	4,22,502	187,585	18,07,942	6
80,937	5,61,746	104,392	6,73,745	3	27	23	198	1,604	12,643	534	720	312	4,299	2,476	17,886	94,279	4,11,953	7
3,396	19,675	18,199	1,40,271	...	...	...	...	98	1,140	...	...	1	5	99	1,145	32,025	1,67,303	9
10,716	2,01,328	48,052	7,99,652	...	...	...	...	10,827	1,33,055	...	...	143,911	10,79,574	154,788	12,12,629	120,353	6,03,369	10
1,332	10,560	7,279	56,073	20	27	...	...	...	...	53	89	15,034	13,007	15,107	13,123	63,048	2,89,651	11
5,794	44,375	6,466	49,291	...	...	1	23	358	3,435	...	...	524	1,032	883	4,490	13,834	52,162	12
27,051	95,403	31,490	1,37,153	...	...	1,686	1,676	...	...	...	...	67	966	1,753	2,632	105,885	4,27,082	13
598	3,130	922	3,188	...	...	...	...	...	...	441	374	637	589	1,078	963	47	16,979	14
5,443	25,957	9,939	46,130	146	376	1	2	53	121	3	16	675	1,193	877	1,709	6,327	10,699	15
44,000	4,17,619	46,632	4,44,225	...	...	...	...	90	3,069	235	760	...	...	331	4,429	20,108	1,94,302	16
...	...	30	10	...	...	...	...	...	...	...	...	...	...	...	...	2,618	461	17
...	...	589	5,236	...	...	...	...	...	...	...	...	...	...	...	...	618	3,191	18
4,915	22,421	7,284	47,617	17	118	64	513	3	23	...	...	214	1,734	298	2,388	9,905	92,386	9
1,701	8,871	2,239	58,689	573	1,093	145	359	1,345	1,094	620	1,876	3,436	9,900	6,119	14,981	21,316	1,45,979	19
4,729	21,060	4,889	21,820	4	25	...	...	534	663	13	47	47	189	598	924	2,344	5,006	7
12,250	73,948	32,693	3,21,224	67	532	36	1,778	1,480	12,483	3,161	5,091	42,409	41,189	47,233	61,073	240,631	24,05,204	3
426	4,723	842	6,971	9	61	49	431	10	30	7,723	20,946	554	903	8,345	23,371	12,903	36,155	20
28,023	1,73,601	30,124	1,88,317	256	1,169	336	1,169	1,297	13,912	591	981	2,391	10,250	4,871	27,981	76,907	2,97,239	21
19,440	1,33,278	54,962	3,90,183	35	163	30	272	3,715	20,496	289	631	4,293	21,275	8,362	43,537	52,453	4,09,116	22
91	377	937	4,317	...	...	...	...	6	21	...	...	...	...	6	21	743	3,269	23
36	97	672	1,873	...	...	...	...	40	18	...	...	...	...	40	18	4,240	9,630	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25
556	1,565	706	2,408	...	...	...	...	...	...	...	...	...	...	...	...	493	707	26
43	37	53	46	...	...	...	...	...	...	...	...	2	1	2	1	286	124	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	194	339	28
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
7	15	13	23	...	...	...	...	...	...	...	...	...	...	...	...	197	209	30
...	...	21	117	...	...	...	...	...	...	8	74	...	...	8	74	10	71	31
2,719	21,185	2,602	22,643	...	...	...	...	...	...	...	...	...	...	...	...	156	1,999	32
2,244	32,644	2,283	33,517	...	...	...	...	...	...	...	...	...	...	...	...	1,116	18,773	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
413,792	34,30,375	705,690	68,19,931	3,294	14,695	19,900	42,982	94,913	6,64,009	21,193	78,265	530,251	22,80,995	669,556	30,80,836	1,047,209	1,03,32,706	
394,919	31,04,305	651,674	63,83,140	3,342	20,846	15,051	62,026	65,156	3,67,039	19,948	89,200	633,744	15,42,687	737,241	20,81,796	1,609,293	99,37,343	
19,773	2,06,070	54,316	5,36,662	...	...	4,949	...	29,763	2,96,070	1,245	...	...	7,38,209	...	9,99,088	37,917	2,55,363	
...	...	...	...	46	6,161	...	19,044	...	...	...	10,935	103,493	...	67,685	...	...	...	

Principal commodities carried by railways and

Number.		Railway system *vide* Appendix 1.	XXV. Saltpetre and other saline substances.						XXVI. Silk.									
			(1) Saltpetre.		(2) Other saline substances.		Total.		(1) Raw.				(2) Piece goods.				Total.	
									(a) Foreign.		(b) Indian.		(a) Foreign.		(b) Indian.			
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.																
1	...	Bengal Central	...	...	96	391	96	391	...	...	...	...	...	...	...	...	...	...
2	(a), (b) & (d).	Bengal-Nagpur	...	...	...	...	...	...	...	...	435	6,297	...	...	...	...	435	6,297
3	(a), (c) to (f), & (m) & (n).	Bombay, Baroda and Central India.	1,144	9,888	1,145	13,983	2,289	23,871	296	7,321	222	5,126	50	1,636	122	3,635	690	17,718
4	...	Eastern Bengal State	26	177	2,856	11,806	2,882	11,983	...	...	107	1,145	...	...	38	326	145	1,471
5	...	East Indian	23,312	2,20,961	18,290	1,31,486	41,602	3,52,347	...	...	948	10,557	...	...	126	4,886	974	15,443
6	...	Great Indian Peninsula	1,151	25,977	3,043	38,898	4,194	64,875	185	2,696	89	5,636	50	4,025	5	231	329	12,590
7	(a) to (c)	Madras	908	10,214	77	1,400	985	11,614	4	79	155	3,004	14	31	18	345	191	3,549
9	(a) & (b)	Nizam's Guaranteed State.	94	606	873	5,909	967	6,515	...	3	1	30	...	...	...	7	1	40
10	...	North-Western State	5,901	37,275	9,798	89,466	15,699	1,26,741	335	7,480	1,621	4,346	39	730	47	1,102	583	13,658
11	...	Oudh and Rohilkhand State.	821	3,003	184	987	1,005	3,990	...	...	...	...	...	...	2	59	2	59
		3′ 3½″ gauge.																
12	...	Assam-Bengal	3	11	...	...	3	11	...	...	20	226	...	...		74	26	300
13	...	Bengal and North-Western.	12,907	50,481	5,513	24,417	18,420	74,898	...	...	33	287	...	...	...	...	33	287
14	...	Bengal-Dooars	...	...	81	142	81	142	...	...	...	...	...	...	...	...	...	...
15	...	Bhavnagar-Gondal-Junagad-Porbandar.	49	234	27	88	76	322	8	40	...	1	...	1	1	20	9	62
16	...	Burma	2	26	33	398	35	424	136	2,384	17	520	5	127	1	61	159	3,092
17	...	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	(c)	Hyderabad-Godavari Valley.	30	355	133	1,031	163	1,386	4	82	1	12	1	27	...	2	6	123
19	...	Jodhpur-Bikaner	309	1,710	1,873	9,639	2,182	11,349	22	139	1	5	...	3	...	3	23	150
7	(d) & (e)	Madras	925	7,586	19	39	944	7,625	...	...	6	38	...	...	...	...	6	38
3	(b) & (g) to (l).	Rajputana-Malwa	9,091	56,916	2,316	16,827	11,407	73,743	261	12,500	29	406	50	3,160	94	5,069	434	21,135
20	(a) & (b)	Rohilkund and Kumaon	84	218	436	1,118	520	1,336	...	...	...	...	...	...	1	10	1	10
21	...	South Indian	647	2,960	7	91	654	3,051	...	...	17	217	...	...	9	39	28	256
22	...	Southern Mahratta	164	1,206	250	2,327	414	3,533	165	2,912	121	830	...	...	...	1	286	3,743
23	...	Udaipur-Chittor	11	65	38	181	49	246	...	...	...	...	...	...	...	...	...	...
		2′ 6″ gauge.																
25	...	Barsi Light	...	...	36	91	36	91	5	15	...	...	...	...	...	...	5	15
26	...	Bukhtiarpore-Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	12	27	...	...	12	27	...	...	...	1	...	...	...	3	...	4
2	(c)	Parlakimedi Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	(c)[1]	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	Ranaghat-Krisnagar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	2	5	...	...	...	...	2	5
34	...	Tezpur-Balipara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	Kalka-Simla	1	9	1	6	2	15	...	...	...	...	...	...	...	...	...	...
		2′ 0″ gauge.																
36	...	Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL, 1904	57,592	4,29,905	47,025	3,50,721	104,617	7,80,626	1,421	35,653	2,266	38,779	209	9,740	476	15,573	4,366	1,00,045
		TOTAL, 1903	58,802	4,51,237	44,925	3,52,917	103,727	8,04,154	1,160	31,917	2,420	43,902	202	7,500	477	15,459	4,279	98,778
		INCREASE	...	...	2,100	...	890	...	241	3,736	...	...	7	2,240	...	414	87	1,267
		DECREASE	1,210	21,432	...	2,196	...	23,628	...	...	154	5,123	...	...	7	...	...	...

DIX 17—*continued.*

the earnings therefrom during the calendar year 1904.

XXVII.														XXVIII.		NUMBER.
Spices.																
(1) Betel-nuts.		(2) Cardamoms.		(3) Chillies.		(4) Ginger.		(5) Pepper.		(6) Others.		Total.		Stone and lime.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
7,203	23,814	...	...	200	561	5	26	...	...	216	844	7,623	24,245	3,745	3,513	1
7,284	70,639	...	...	6,041	64,155	...	...	...	...	6,135	42,498	19,460	1,77,292	63,420	1,71,080	2
983	19,600	124	1,533	2,283	24,709	1,297	14,222	737	14,623	7,720	85,781	13,194	1,60,608	28,901	94,731	3
13,132	1,10,124	253	4,711	5,064	33,521	1,194	19,453	251	3,478	2,561	15,789	22,455	1,87,075	29,206	45,613	4
11,322	2,38,554	477	12,165	12,313	1,59,251	1,141	10,425	1,125	30,453	10,051	1,63,695	36,429	6,14,543	317,159	12,44,742	5
9,688	1,99,440	109	5,367	8,456	73,488	613	16,886	579	23,515	10,925	1,38,219	30,369	4,56,915	127,921	2,94,831	6
11,645	1,28,336	36	604	15,863	1,17,392	1,279	8,554	4,213	33,161	4,193	25,655	37,229	3,13,702	125,515	1,97,943	7
820	8,900	9	124	2,499	18,450	69	603	41	457	1,685	13,049	5,123	41,959	16,308	57,002	9
585	6,123	243	4,368	6,169	63,067	1,662	19,907	391	28,805	3,499	34,095	13,049	1,56,355	272,631	3,77,449	10
2,098	34,125	57	499	1,607	14,443	492	4,251	87	906	2,001	10,073	6,343	64,297	109,573	1,21,269	11
1,537	12,259	...	...	523	2,518	2	13	5	34	80	638	2,147	15,462	1,997	4,777	13
2,925	24,794	513	5,318	8,215	44,907	1,303	12,693	460	5,047	1,891	14,939	15,306	1,07,698	27,910	60,434	13
128	602	46	311	10	35	63	122	...	...	4	14	251	1,084	1,543	2,245	14
636	3,169	4	29	317	1,777	25	152	9	70	893	4,147	1,884	9,344	64,727	42,626	15
6,421	77,320	...	7	6,253	1,22,037	856	7,395	17	457	218	1,955	13,763	2,09,171	89,750	1,35,513	16
30	8	2	1	15	4	...	...	10	3	...	...	57	16	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,560	6,982	18
465	5,279	...	9	1,104	11,412	26	248	14	170	291	2,747	1,900	19,865	1,033	5,126	9
128	924	6	53	696	6,023	39	349	34	237	401	1,918	1,306	9,504	30,627	41,283	19
1,364	3,564	8	38	2,438	8,810	14	70	237	737	52	196	4,113	13,415	504	2,912	7
779	12,469	102	2,830	3,413	39,321	607	16,823	550	18,103	11,349	1,04,327	16,800	1,93,873	42,666	1,28,676	8
209	1,866	27	143	360	2,108	104	467	25	197	417	1,443	1,142	6,223	9,322	13,960	20
15,895	84,834	289	2,674	9,555	1,01,257	781	7,164	688	6,909	361	2,398	27,569	2,03,236	158,684	1,84,029	21
10,856	86,498	193	2,647	14,993	1,09,260	332	3,145	446	3,604	8,008	55,124	34,830	2,60,278	38,663	71,761	22
4	32	...	5	18	93	12	73	3	24	66	255	103	481	24	67	23
485	1,307	...	...	67	177	8	26	8	24	149	390	717	1,924	79	117	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
20	73	...	...	52	247	6	19	3	9	243	1,055	324	1,403	43	151	31
3	3	...	...	17	14	...	...	...	...	30	24	50	41	19	12	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	43	112	34
1	17	...	2	...	7	12	149	...	2	3	54	16	230	773	10,572	29
58	1,406	163	2,578	7	167	...	6	17	453	54	1,088	299	5,697	1,358	13,280	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
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106,703	11,55,079	2,660	45,906	108,560	10,22,211	11,941	1,43,243	10,502	1,71,767	73,495	7,22,790	313,850	32,60,986	1,567,980	33,32,945	
102,564	11,16,667	2,410	44,914	101,162	9,07,643	10,935	1,42,150	8,230	1,44,984	69,384	7,29,696	295,295	30,85,954	1,399,618	28,62,853	
4,139	38,412	250	992	7,398	1,14,568	956	1,093	2,212	26,883	6,111	...	18,555	1,75,032	178,362	4,70,092	
...	...	...	...	...	...	...	...	...	...	...	6,916	...	...	...	...	

APPEN

Principal commodities carried by railways and

Number.		Railway system *vide* Appendix 1.	XXIX. Sugar.								XXX. Tea.					
			(1) Refined or crystalized including sugar-candy.		(2) Unrefined. (a) Sugar.		(2) Unrefined. (b) *Gur, rab*, jaggery, molasses and other sacharine produce.		Total.		(1) Foreign.		(2) Indian.		Total.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5' 6" gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	Bengal Central	646	2,355	2,042	5,213	730	1,962	3,418	9,530	...	...	1	7	1	7
2	(a) (b) & (d)	Bengal-Nagpur	11,245	76,774	...	...	12,539	1,07,069	23,784	1,83,843	...	...	437	6,629	437	6,629
3	(a), (e), to (f) & (m) & (o)	Bombay, Baroda and Central India	34,810	4,30,694	166	782	28,776	2,51,946	63,752	6,83,322	393	5,540	1,061	13,602	1,454	18,942
4	...	Eastern Bengal State	12,384	90,096	13,312	58,989	23,114	1,19,653	48,810	2,68,132	...	...	29,021	5,82,812	29,021	5,82,812
5	...	East Indian	36,434	4,03,550	53,585	3,97,399	113,259	5,69,244	202,278	13,70,192	...	...	2,438	36,234	2,438	36,234
6	...	Great Indian Peninsula	62,271	10,20,328	7,397	61,234	96,245	9,10,428	165,913	19,91,990	104	2,020	1,348	31,933	1,452	33,953
7	(a) to (e)	Madras	11,263	82,433	6,090	39,321	43,036	1,83,241	60,389	2,74,995	164	2,611	385	6,955	549	9,566
9	(a) & (b)	Nizam's Guaranteed State	2,187	16,208	1,613	15,332	5,058	38,306	8,858	69,836	18	248	52	896	70	1,144
10	...	North-Western State	72,450	14,63,126	17,662	1,13,892	132,749	9,16,814	223,860	24,93,772	777	22,606	2,636	35,240	3,413	57,846
11	...	Oudh and Rohilkhand State	13,655	69,561	59,827	2,62,279	78,723	2,69,758	152,205	6,01,618	...	...	2,086	12,155	2,086	12,155
		3' 3½" gauge.														
12	...	Assam-Bengal	219	923	1,289	6,144	2,587	11,214	4,095	18,281	...	...	29,238	3,42,868	29,238	3,42,868
13	...	Bengal and North-Western	4,407	24,711	31,688	2,00,421	63,501	320,779	99,596	5,45,911	...	...	49	598	49	598
14	...	Bengal-Dooars	521	1,665	35	115	1,198	5,387	1,754	7,167	...	...	30,316	2,62,931	30,316	2,62,931
15	...	Bhavnagar-Gondal-Junagad-Porbandar.	6,660	31,224	...	...	4,663	19,041	11,323	50,265	2	20	63	500	65	520
16	...	Burma	292	2,172	4,751	53,976	13,009	1,25,549	18,052	1,81,697	1,109	19,009	47	736	1,156	20,405
17	...	Deoghur	...	...	200	63	400	109	600	172	...	...	...	...	...	...
18	...	Dibru-Sadiya	407	3,129	...	...	...	...	407	3,129	...	...	7,655	59,241	7,655	59,241
9	(c)	Hyderabad-Godavari Valley	1,883	15,750	114	1,263	3,794	30,761	5,791	47,803	3	99	3	53	6	152
19	...	Jodhpur-Bikaner	2,991	21,278	4,246	22,063	9,338	61,273	16,575	1,04,613	2	37	3	67	5	104
7	(d) & (c)	Madras	669	3,468	193	896	1,357	3,458	2,219	7,822	5	28	214	970	219	998
3	(b) & (g) to (l)	Rajputana-Malwa	24,591	2,67,766	45,155	3,85,636	86,592	19,17,463	156,338	16,70,865	607	12,408	154	2,358	761	14,826
20	(a) & (b)	Rohilkund and Kumaon	1,171	4,013	7,031	17,193	19,609	73,872	27,811	95,078	...	...	236	2,096	236	2,096
21	...	South Indian	18,522	66,373	7,472	22,333	40,906	2,59,136	66,900	3,46,842	25	218	3,613	24,038	3,638	24,256
22	...	Southern Mahratta	7,599	45,830	6,513	43,005	60,791	3,59,842	74,903	4,48,677	30	509	35	622	65	1,131
23	...	Udaipur-Chitor	208	1,273	801	3,972	654	2,785	1,663	8,030	...	...	1	10	1	10
		2' 6" gauge.														
25	...	Barsi Light	455	1,110	4	7	430	1,075	889	2,192	...	...	...	...	...	...
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	Morvi	411	1,380	48	112	1,271	2,888	1,730	4,380	...	...	4	22	4	22
2	(c)	Parlakimedi Light	67	61	...	...	18	10	105	71	...	...	...	...	...	...
20	(e)	Powayan Light	...	...	1,039	1,026	...	...	1,039	1,026	...	...	...	...	...	...
...	...	Ranaghat-Krishnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	28	37	92	133	120	170	...	...	...	...	...	...
34	...	Tezpur Balipara	3	25	...	...	...	...	3	25	...	...	3,309	23,408	3,309	23,408
29	...	Kalka-Simla	111	2,424	4	72	173	2,631	288	5,127	11	185	24	396	35	581
		2' 0" gauge.														
36	...	Darjeeling-Himalayan	29	539	706	12,363	355	5,307	1,092	18,208	...	...	4,221	59,747	4,221	59,747
37	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL, 1904	329,591	41,20,062	272,033	17,24,760	845,956	56,69,453	1,446,580	1,15,14,275	3,250	66,068	118,860	15,07,124	122,100	15,73,182
		TOTAL, 1903	300,938	36,00,122	266,330	15,91,256	860,597	56,64,417	1,429,865	1,08,55,795	37,044	302,776	84,328	12,19,364	121,372	15,22,140
		INCREASE	27,653	5,19,940	3,703	1,33,504	...	5,036	16,715	6,58,480	...	...	34,522	2,87,760	728	51,042
		DECREASE	...	...	...	...	14,641	...	...	...	33,794	2,36,718	...	...	...	...

DIX 17—*cont inued.*

the earnings therefrom during the calendar year 1904.

XXXI. Tobacco.								XXXII. Wood.						XXXIII—(continued on following page). Wool.								Numbers.
(1) Unmanufactured.		(2) Manufactured. (a) Cigars.		(b) Other sorts.		Total.		(1) Timber, unwrought.		(2) Manufactured.		Total.		(1) Raw.		(2) Manufactured. (a) Carpets and rugs.		(b) Piece-goods, European.		(c) Piece-goods, Indian.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
2,557	9,648	...	...	34	178	2,591	9,826	2,782	5,353	421	1,982	3,203	7,335	...	...	...	...	...	...	...	...	1
7,375	57,013	...	...	630	10,350	8,005	67,363	43,666	1,86,642	2,026	14,625	45,117	2,00,267	...	...	...	...	...	...	...	...	2
14,513	1,18,806	491	5,327	3,583	10,471	18,587	1,34,604	30,965	1,90,228	2,968	29,491	33,933	2,19,719	7,444	1,44,190	261	4,386	277	5,931	312	8,656	3
33,214	3,26,310	...	...	472	7,586	33,686	3,33,896	10,717	47,459	2,391	13,945	13,102	61,404	159	2,448	...	...	...	...	111	1,690	4
31,394	3,32,348	85	3,350	2,402	69,212	33,881	4,04,910	54,792	2,26,735	7,822	70,421	62,614	2,97,156	1,615	22,968	513	16,995	384	15,344	421	19,670	5
7,255	73,804	280	33,619	377	8,431	8,612	1,16,054	106,737	6,00,909	6,339	82,258	173,076	6,83,167	684	13,961	46	1,969	289	13,930	236	7,493	6
24,712	1,53,983	609	13,070	1,282	18,165	26,602	1,85,218	209,455	6,59,481	7,485	29,873	216,940	6,89,354	1,100	10,643	587	4,161	196	5,419	398	3,776	7
1,276	17,516	114	1,843	36	564	1,426	19,923	20,793	85,171	592	5,816	21,385	90,987	154	1,556	93	1,213	23	317	207	2,616	9
15,376	1,45,850	102	2,459	1,074	49,321	17,151	1,96,629	104,266	3,70,530	10,067	1,00,532	114,353	4,71,062	21,156	5,73,043	256	5,035	537	11,736	1,501	37,165	10
7,685	34,391	95	1,085	211	2,069	7,961	37,545	92,526	1,83,252	4,699	25,609	97,224	2,09,860	325	2,065	1	14	75	618	306	3,767	11
1,724	11,80-	5	66	90	1,078	1,819	12,952	632	2,286	1,484	10,872	2,116	13,158	...	1	14	282	...	...	1	34	12
34,240	2,70,888	36	656	362	2,304	34,638	2,73,938	30,178	89,673	4,426	31,376	34,60	1,21,249	85	1,104	38	376	28	359	196	2,384	13
2,317	4,804	...	...	21	143	2,338	4,947	2,120	5,074	190	1,042	2,319	6,116	...	...	...	...	...	...	...	...	14
1,254	6,806	6	45	206	1,552	1,466	8,475	11,775	56,421	944	6,515	12,719	62,936	634	4,060	...	...	2	17	2	161	15
4,122	39,711	147	2,164	678	6,933	4,947	48,808	128,794	5,44,639	2,642	20,167	131,436	5,64,746	22	277	143	2,587	15	237	...	...	16
140	42	52	15	...	...	192	57	40	12	...	...	40	12	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	4,406	22,694	...	...	4,406	22,694	...	...	...	...	...	...	...	...	18
156	3,016	3	55	12	160	201	3,251	8,063	37,088	976	7,323	9,039	39,411	3	27	25	507	1	27	54	614	9
1,441	9,70-	30	334	101	1,038	1,572	11,074	1,816	7,971	195	1,362	1,711	9,333	4,598	42,063	10	132	14	207	39	384	19
2,236	8,0-	38	328	61	235	2,335	8,603	16,603	24,656	374	2,124	17,267	26,780	...	...	12	159	...	...	...	3	7
11,636	1,35,55-	382	5,732	1,606	13,374	13,586	1,54,658	14,822	67,396	2,392	31,346	18,214	98,742	11,024	1,71,126	126	5,947	290	11,965	645	18,606	3
1,988	9,401	23	306	215	1,872	2,226	11,579	33,354	1,02,332	1,217	5,719	34,571	1,08,051	124	993	2	19	1	3	23	289	20
7,94	45,72-	1,656	16,731	2,609	8,986	11,966	71,444	108,373	1,75,103	6,216	39,380	114,591	2,14,483	92	766	47	416	4	31	139	2,581	21
11,14-	60,86-	319	6,328	268	3,577	11,730	70,774	39,167	1,84,619	5,093	27,573	44,262	2,12,392	186	2,070	1	18	3	61	67	681	22
274	1,29-	...	2	16	83	290	1,366	14	98	12	71	26	169	85	695	...	4	...	...	1	10	23
30	83	2	4	7	39	39	126	225	478	97	265	322	743	1	3	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
659	2,110	2	10	35	214	696	2,334	989	3,317	125	558	1,114	3,875	207	1,697	2	6	...	...	2	13	31
4	4	...	...	...	...	4	4	2	2	19	29	21	31	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	778	1,555	...	...	778	1,555	...	...	...	...	...	...	...	...	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	16	...	...	...	...	9	16	...	...	11	20	11	2	...	...	...	...	...	...	...	...	33
2	16	...	...	...	...	2	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
10	462	14	359	17	338	51	1,159	279	4,196	105	1,783	384	5,969	2	46	9	215	32	707	46	1,123	29
83	1,619	159	3,913	87	1,702	329	7,234	292	2,572	169	2,936	461	5,50-	2	45	5	122	8	223	12	360	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
225,76-	18,81,718	5,239	98,000	16,861	2,19,085	247,858	21,98,783	1,138,826	38,81,322	72,529	5,61,962	1,211,354	44 43,274	49,701	9,96,576	2,192	44,482	2,469	56,312	4,949	1,04,776	
207,202	16,92,747	4,906	97,955	13,726	1,93,968	225,824	19,83,670	996,681	32,82,091	74,258	5,49,828	1,070,939	38,31,829	38,705	7,96,796	3,156	52,331	2,376	45,161	4,236	84,507	
18,566	1,88,971	343	45	3,125	26,097	22,034	215,113	142,144	5,80,331	...	15,124	140,415	6,14,445	10,996	1,99,780	...	...	93	21,151	713	20,269	
...	...	...	...	...	...	...	...	...	...	1,729	...	...	...	...	...	966	7,849	...	...	...	...	

APPEN

Principal commodities carried by railways and

Number.		Railway system, *vide* Appendix I.	XXXIII. Wool—*concluded.* (2) Manufactured—*concld.* (d) Other sorts of manufactures.		Total.		XXXIV. All other articles of merchandise.		Grand Total.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5' 6" gauge.								
1	...	Bengal Central	1	16	1	16	7,933	27,084	209,975	6,44,105
2	(a), (b) & (d)	Bengal-Nagpur	...	...	...	...	100,005	4,94,735	2,643,152	99,68,419
3	(a), (c) to (f'), & (m) & (n)	Bombay, Baroda and Central India	88	1,351	8,462	1,64,514	290,675	12,84,753	1,572,823	1,09,21,865
4	...	Eastern Bengal State	...	...	269	4,033	119,781	6,86,091	2,153,969	1,03,42,798
5	...	East Indian	1,249	37,235	4,183	103,133	560,130	31,81,613	10,534,785	5,16,64,243
6	...	Great Indian Peninsula	1,109	23,635	2,393	60,947	196,655	18,92,500	3,493,805	3,95,50,617
7	(a) to (c)	Madras	741	8,535	3,032	32,534	116,573	9,62,341	2,296,675	1,07,43,193
9	(e) & (h)	Nizam's Guaranteed State	...	...	477	5,662	13,034	1,06,423	712,637	33,37,560
10	...	North Western State	1,290	27,140	25,033	6,56,109	316,503	24,03,588	4,179,712	4,32,11,683
11	...	Oudh and Rohilkhand State	...	...	737	6,664	165,415	8,02,775	1,667,673	68,62,223
		3' 3½" gauge.								
12	...	Assam-Bengal	13	150	28	457	14,535	1,01,750	2,66,522	13,03,439
13	...	Bengal and North-Western	3	60	353	4,233	86,110	2,56,518	1,433,344	*61,31,948
14	...	Bengal-Dooars	...	...	...	...	18,059	73,373	114,820	5,02,593
15	...	Bhavnagar-Gondal-Junagad-Porbandar	—1	—1	662	4,237	9,670	52,140	283,923	9,49,339
16	...	Burma	2	30	181	3,121	194,421	6,83,649	1,265,701	60,92 051
17	...	Deoghur	...	...	...	...	5,683	1,929	13,805	3,925
18	...	Dibru-Sadiya	...	...	...	...	288,484	1,96,754	695,760	7,95,668
9	(c)	Hyderabad-Godavari Valley	...	4	83	1,179	3,251	57,507	164,708	12,32,547
19	...	Jodhpur-Bikaner	123	1,159	4,784	44,895	14,312	86,309	350,583	16,93,468
7	(d) & (e)	Madras	...	1	19	163	5,204	39,503	97,093	2,92,612
8	(b) & (g) to (l)	Rajputana-Malwa	107	2,420	12,186	2,03,066	198,906	10,78,071	1,719,104	1,70,57,706
20	(a) & (b)	Rohilkund and Kumaon	197	1,319	317	2,535	91,074	1,62,504	370,473	9,56,746
21	...	South Indian	167	1,146	389	4,940	128,314	6,61,417	1,368,320	54,97,910
22	...	Southern Mahratta	875	8,700	1,132	11,500	98,935	3,30,737	1,118,230	63,99,623
23	...	Udaipur-Chitor	...	3	86	611	1,015	10,250	11,182	54,593
		2' 6" gauge.								
25	...	Barsi Light	3	3	4	11	643	2,022	59,519	1,35,957
26	...	Bukhtiarpore-Behar Light	...	...	...	...	24,612	33,394	24,642	33,334
31	...	Morvi	4	22	215	1,698	1,427	6,254	24,108	92,547
2	(c)	Parlakimedi Light	...	...	...	...	416	376	6,692	5,142
20	(c)	Powayan Light	...	...	...	...	17,765	23,219	24,226	33,038
...	...	Ranaghat-Krishnagar	...	...	...	...	...	1,800	...	1,800
33	...	Tarakeshwar-Magra	...	...	...	...	14,841	5,109	22,039	13,320
34	...	Tezpur-Balipara	...	...	...	...	1,027	9,215	8,348	43,270
29	...	Kalka-Simla	2	53	91	2,146	2,255	42,270	13,014	1,84,922
		2' 0" gauge.								
36	...	Darjeeling-Himalayan	3	76	30	926	4,206	57,220	37,896	5,41,839
37	...	Howrah-Amta	...	...	...	...	13,311	23,423	13,311	23,423
38	...	Howrah-Sheakhala	...	...	...	...	6,474	8,428	6,474	8,428
39	...	Jorhat	...	...	...	...	9,791	46,228	9,791	46,228
		Total 1904	5,914	1,13,153	65,225	13,25,294	3,140,669	1,61,84,116	28,907,413	23,60,80,494
		Total 1903	4,991	87,847	53,464	10,66,642	2,526,206	1,49,63,650	24,875,496	21,06,45,743
		Increase	923	25,305	11,761	2,58,656	673,271	12,20,466	4,031,917	2,54,34,751
		Decrease	...	...	...	...	...	...	...	...

DIX 17—*concluded.*

the earnings therefrom during the calendar year 1904.

ANIMALS.										Number.	Remarks.
(1) Horses.		(2) Cattle.		(3) Sheep, etc.		(4) Elephants.		Total.			
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
...	...	2	31	...	...	...	...	2	31	1	
64	3,411	5,109	23,455	3,185	31,944	1	35	9,359	58,845	2	
292	11,986	8,280	1,72,906	13,723	2,70,099	...	...	22,295	4,54,971	3	
35	889	172	4,048	333	3,351	...	...	540	8,288	4	
1,407	78,683	2,097	63,532	4,095	1,06,033	...	313	7,599	2,50,561	5	
1,499	84,662	6,407	69,375	8,723	1,37,441	...	...	16,709	2,91,498	6	
...	...	...	...	...	...	...	...	...	...	7	
327	9,017	70	1,345	9	137	...	...	406	10,499	9	
3,725	1,03,964	1,627	29,131	239	9,371	...	...	5,591	1,41,466	10	
630	26,395	341	6,375	46	1,450	...	...	1,007	34,710	11	
4	127	53	801	169	2,086	...	...	226	3,014	12	
173	9,865	923	43,377	195	5,046	...	...	1,291	56,938	13	* Excluding Rs. 4,97,697 in respect of ferries and steam boats, which are included in the details.
...	...	...	...	...	...	...	...	...	...	14	
65	782	48	548	2	54	...	—118	115	1,266	15	
949	32,156	6,406	2,22,209	1,510	40,633	...	...	8,845	2,94,998	16	
...	...	...	...	...	...	...	...	...	...	17	
...	...	23	258	...	...	...	...	23	258	18	
65	1,174	10	593	5	86	...	...	80	1,853	9	
119	2,193	14	167	10	39	...	...	143	2,399	19	
...	...	...	...	...	...	...	...	...	...	7	
414	13,574	1,181	21,033	3,796	47,681	...	...	5,394	82,518	3	
38	1,060	192	2,038	1	15	...	...	231	3,713	20	
21	848	1,328	7,904	3,668	31,505	...	...	5,029	40,257	21	
162	5,637	314	5,078	456	3,552	2	201	834	14,468	22	
12	120	1	6	...	9	...	...	13	135	23	
...	...	...	...	...	...	...	...	...	...	25	
...	...	...	...	...	...	...	...	...	...	26	
5	81	2	23	...	...	...	...	7	109	31	
...	...	...	...	...	...	...	...	...	...	2	
...	...	...	...	...	...	...	...	...	...	20	
...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	33	
...	...	...	...	...	...	...	...	...	...	34	
...	...	...	...	...	...	...	...	...	...	29	
...	...	...	51	...	...	...	...	...	51	36	
...	...	...	...	...	...	...	...	...	...	37	
...	...	...	...	...	...	...	...	...	...	38	
...	...	...	...	...	...	...	...	...	...	39	
9,989	3,55,834	34,598	6,73,939	40,245	6,92,731	3	434	84,735	17,52,938		
29,935	4,23,703	40,248	7,29,703	57,057	6,17,152	3	1,553	130,228	18,08,535		
...	...	...	...	...	65,579	...	...	...	...		
11,946	37,969	5,650	54,764	16,812	...	...	1,119	35,403	55,697		

APPEN

Analysis of working of each railway

NOTE. – Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number	1(a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (f)		7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a)
		Calendar year 1904.	Bengal Central.	Bengal Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula. G I.P.	Great Indian Peninsula. I. M.	Madras	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	DESCRIPTION OF RAILWAY WORKED.													
1	Gauge of railway	...	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	3′ 3½″
2	Mileage worked . . . *Miles*	...	138·89	1,693 33	833·87	278·68	2,242·53	1,566·47	1,194·96	1,407·23	354·70	3,805·64	1,170·42	734·80
3	Number of stations . . *No.*	...	27	231	132	84	372	237	161	290	45	541	177	103
4	Total length of the following gradients :—													
	(*a*) $\frac{1}{30}$ and less . . *Miles*	...	...	...	...	...	5·90	19·31	6·75	...	...	71·12	...	10·10
	(*b*) $\frac{1}{31}$ to $\frac{1}{50}$ . . . . ,,	...	...	0·15	1·32	...	16·78	2·82		22·84	...	84·97	9·30	33·03
	(*c*) $\frac{1}{51}$ to $\frac{1}{100}$ . . . . ,,	...	...	101·51	0·50	...	40·27	61·90	11·23	52·80	79·19	123·43	6·41	25·70
	(*d*) $\frac{1}{101}$ to $\frac{1}{200}$ . . . ,,	...	...	570·47	168·46	...	150·25	549·90	361·74	289·63	110·99	99·85	19·15	89·99
	(*e*) $\frac{1}{201}$ to $\frac{1}{300}$ . . . ,,	...	...	141·71	63·31	2·45	131·88	210·95	104·48	156·57	18·22	97·44	22·56	30·98
5	Steepest gradient worked –													
	(*a*) Length . . . *Miles*	...	...	0·15	1·32	2·00	13·34	5·99	2·40	0·20	2·52	7·15	2·25	8·54
	(*b*) Inclination . . .	...	$\frac{1}{200}$	$\frac{1}{50}$	$\frac{1}{80}$	$\frac{1}{300}$	$\frac{1}{80}$	$\frac{1}{37}$	$\frac{1}{66}$	$\frac{1}{80}$	$\frac{1}{100}$	$\frac{1}{82}$	$\frac{1}{175}$	$\frac{1}{37}$
	FINANCIAL RESULTS.	Calendar year 1904 by half-years.												
6	Percentage of net earnings (including steam-boat traffic) for each half-year on capital outlay . *Per cent.*	1st half	1·54	2·29	3·68	1·23	5·18	4·64	2 23	2·09	3·24	2·52	2·57	—0·01
		2nd ,,	2·56	1·61	2 77	5·09	4·97	2·99	1 48	1 77	3·22	3·58	2 22	0·14
7	Percentage of net earnings for each half-year on paid up capital . . . . *Per cent.*	1st half	1·57	2·27	3·35	...	...	...	2 27	2·09	2·74	...	...	...
		2nd ,,	2·61	1 60	2·50	...	...	...	1·49	1·78	2·74	...	...	...
	OUTLAY, EARNINGS AND EXPENSES. *(Exclusive of Steam-boat Service.)*													
8	Capital outlay per mile open . Rs.	1st half	1,03,080	1,37,337	1,88,927	2,86,433	2,27,654	1,95,786	1,38,238	1,39,083	1,28,838	1,44,920	1,18,581	1 55,689
		2nd ,,	1,03,159	1,39,675	1,89,376	2,79,033	2,29,159	1 98,361	1,39,418	1,39.940	1,29,187	1,43,843	1,18,083	1,57,133
9	Total earnings per mile open per week . . . . . ,,	1st half	179	226	499	594	684		451	261	255	312	2·9	69
		2nd ,,	2·53	195	405	907	662		363	259	249	354	226	84
10	Total working expenses per mile open per week . . . . ,,	1st half	123	100	225	456	229		204	144	94	167	137	70
		2nd ,,	160	105	199	341	221		202	159	89	148	121	75
11	Total earnings per train-mile . ,,	1st half	3·38	3·94	6·71	4·40	4·74		4·15	3·92	4·82	3·61	3·32	2·52
		2nd ,,	3 86	3·60	5·80	5 60	4·84		3·55	3·87	4·81	4·06	3·13	2·64
12	Total working expenses per train-mile . . . . ,,	1st half	2·32	1·73	3·03	3·38	1·59		1·88	2·17	1·78	1·93	1·76	2·54
		2nd ,,	2·41	1·93	2·85	2·11	1·62		1·97	2·37	1·71	1·70	1·68	2·36
13	Net earnings per train-mile . ,,	1st half	1·06	2·21	3·68	1·02	3·15		2·27	1·75	3·04	1·68	1·56	—0·02
		2nd ,,	1·42	1·67	2·95	3·49	3·22		1·58	1·50	3·10	2 36	1·45	0·28
14	Cost per 1,000 gross ton miles moved (freight and dead-weight) . . . . . ,,	1st half	10·02	4·68	7·19	9·52	3·24		5·88	6·66	4 19	5·41	4·83	13·47
		2nd ,,	7·89	5·62	7·33	4·94	3·14		5·86	7·21	4·05	4 36	4·03	11·13
15	Percentage of total working expenses on total earnings *Per cent.*	1st half	68·55	44·01	45·13	76·78	33·47		45·33	55·23	36·84	53·59	53·01	100·90
		2nd ,,	63·17	53·65	49·12	37·65	33 47		55·52	61·29	35·50	41 57	53·65	89·45
16	Percentage of total working expenses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores . . . *Per cent.*	1st half	68·24	41·98	44·53	78·24	32·09		43·70	54·48	36·11	50·97	51·05	100·83
		2nd ,,	62 64	51 90	48 54	37·42	32·04		53 81	60 45	34·99	39·56	51·57	89·07
	(Inclusive of Steam-boat Service.)													
17	Percentage of total working expenses on total earnings (for details, see items 123–129) *Per cent.*	1st half	68·55	44·45	45·13	76·78	33·64		45·33	55·23	36·84	53·61	53·01	100·84
		2nd ,,	63·17	54·20	49·12	37·65	33·62		55·52	61·29	35·50	41·91	53·65	89·74

DIX 18.

(by systems) during each half-year of 1904.

do not prepare these statistics.

3′ 3¾″												2′ 6″				Gauge.	
13 (a) & (b)	15 (a) to (d)	16 (a)	4 (b) & (c)	9 (c)	19 (a) to (c)	12 (b)	3 (g) to (i)	20 (a) & (b)	21 (a) to (f)	22 (a) to (h)	23(a)	2 (b)	29 (a)	10 (f) & (g)	2 (d)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904.	
3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	3′ 3¾″	2′ 6″	2′ 6″	2′ 6″	2′ 6″	...	1
1,469·56	455·45	1,340·03	734·85	391·13	824·27	34·90	1,923·77	281·54	1,314·51	1,646·19	68·72	157·43	59·44	131·98	56·24	...	2
·264	64	229	129	45	84	6	277	47	229	230	7	23	20	21	8	...	3
...	1·33	64·52	0·37	...	...	...	3·40	...	0·04	15·06	...	...	35·26	0·96	...	...	4
...	0·28	31·83	0·64	...	...	...	0·23	6·41	14·64	48·92	...	22·98	2·38	...	...	...	
...	1·68	47·78	2·05	...	...	...	18·75	8·56	130·82	537·07	1·10	53·98	9·94	43·55	...	...	
1·93	123·76	155·52	20·81	221·73	165·92	7·45	314·99	4·40	243·71	250·35	30·75	35·80	3·40	36·24	18·60	...	
2·03	64·74	107·78	14·65	13·95	59·59	0·67	159·60	6·83	103·56	95·69	6·98	14·14	...	22·74	1·95	...	
6·70	1·83	9·81	0·87	5·41	2·31	0·58	3·40	3·00	0·04	15·06	0·46	0·07	27·61	9·42	2·41	...	5
1/100	1/10	1/8	1/100	1/32	1/100	1/100	1/10	1/10	1/10	1/10	1/100	1/3	1/3	1/32	1/32	...	
																Calendar year 1904 by half-years.	
3·97	3·49	3·09	2·39	2·07	4·52	...	4·08	4·23	3·79	1·95	1·46	0·56	..	—1·55	2·35	1st half	6
2·91	1·74	1·86	2·95	0·88	3·55	...	4·00	3·05	3·57	0·91	1·10	0·32	0·68	—0·75	1·12	2nd „	
...	...	3·09	...	2·01	...	...	...	...	...	...	...	0·30	...	...	2·35	1st half	7
...	...	...	...	0·86	...	...	...	...	...	...	...	0·30	0·69	...	1·12	2nd „	
77,864	49,995	95,212	95,906	66,495	25,471	...	76,208	47,021	70,822	79,957	30,700	47,161	..	62,686	24,823	1st half	8
73,640	42,769	96,143	92,289	66,709	25,553	...	75,612	47,338	75,585	85,876	30,700	44,477	2,72,162	63,433	24,823	2nd „	
188	110	235	211	121	75	30	230	138	195	138	46	34	...	40	41	1st half	9
151	77	197	220	97	68	32	238	112	198	114	40	27	220	49	30	2nd „	
69	43	117	116	67	30	29	106	61	87	76	29	23	...	76	19	1st half	10
65	44	124	114	74	33	36	117	56	88	84	27	21	146	67	19	2nd „	
3·18	4·35	3·56	3·21	2·94	3·02	2·11	3·64	2·95	3·20	2·84	3·07	2·17	...	0·93	2·05	1st half	11
2·68	3·70	3·10	3·49	2·65	2·79	1·57	3·55	2·78	3·06	2·51	2·76	1·77	3·93	1·13	1·43	2nd „	
1·16	1·71	1·77	1·77	1·64	1·23	2·05	1·68	1·31	1·43	1·57	1·92	1·44	...	1·76	0·53	1st half	12
1·16	2·12	1·96	1·80	2·08	1·34	1·79	1·74	1·38	1·36	1·84	1·86	1·39	2·60	1·52	0·92	2nd „	
2·02	2·64	1·79	1·44	1·30	1·79	—0·06	1·96	1·65	1·77	1·27	1·15	0·73	...	—0·83	1·12	1st half	13
1·52	1·58	1·14	1·69	0·62	1·45	—0·22	1·81	1·40	1·70	0·67	0·90	0·38	1·32	—0·39	0·51	2nd „	
4·72	8·64	8·24	9·23	7·83	5·70	14·14	7·40	7·08	7·67	7·97	11·08	8·55	..	26·49	11·16	1st half	14
5·31	12·11	9·27	8·51	9·59	6·52	18·59	7·39	7·84	7·39	9·86	11·40	8·47	40·75	23·73	13·98	2nd „	
36·35	39·36	49·74	55·10	55·75	40·55	97·04	46·04	43·84	44·71	55·28	62·48	66·03	...	190·55	45·29	1st half	15
43·14	57·35	63·19	51·61	76·47	48·10	114·01	49·03	49·09	44·55	73·37	67·56	78·42	66·28	134·64	64·19	2nd „	
35·06	39·04	48·83	51·63	54·89	39·41	97·04	45·16	43·35	41·00	54·12	62·46	63·20	...	193·97	40·96	1st half	16
41·81	57·12	62·12	50·27	73·78	46·66	114·01	48·24	49·63	43·74	72·17	67·54	75·91	65·71	135·27	60·39	2nd „	
36·15	39·36	50·34	53·69	55·75	40·55	97·04	46·04	43·84	44·71	55·28	62·48	66·03	...	195·02	45·29	1st half	17
43·11	57·35	63·85	54·13	76·47	48·10	114·01	49·03	49·09	44·55	73·37	67·56	78·42	66·28	137·48	64·19	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′6″										
		Number	1(*a*)	2(*a*)	3 (*a*) to (*f*)	4(*a*)	5 (*a*) to (*d*)	6 (*a*) to (*f*)	7 (*a*) to (*c*)	9 (*a*) & (*b*)	10(*a*) to (*e*)	11 (*a*) & (*b*)	12 (*a*)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.												
18	Total working expenses for both coaching and goods traffic excluding steam-boat expenses, and after deducting telegraph and sundry receipts (in thousands of Rs.) . . Rs.	1st half	3,66	41,29	46,23	30,45	1,28,57	1,43,33	50,79	7,99	1,59,15	37,32	12,50
		2nd ,,	5,63	43,71	41,36	21,63	1,23,94	1,42,05	56,15	7,34	1,43,29	35,32	13,40
	Proportions, *dividing expenditure in ratio of gross ton-mileage (freight and dead load)*—												
19	Coaching in thousands of Rs. . ,,	1st half	2,27	12,21	17,81	12,97	31,28	40,29	17,16	1,87	43,81	15,89	5,57
		2nd ,,	1,97	15,01	18,84	7,12	32,23	50,19	18,71	1,80	35,91	16,25	4,51
20	Goods in thousands of Rs. . ,,	1st half	1,39	29,08	28,42	17,48	97,29	1,03,04	33,63	6,12	1,15,34	21,43	6,93
		2nd ,,	3,66	28,70	22,52	14,51	91,71	91,86	37,44	5,54	1,07,88	19,07	8,89
	COACHING TRAFFIC.												
	Gross receipts and train-mileage (in thousands)—												
21	Receipts from coaching [traffic Rs.	1st half	4,09	31,59	34,06	17,90	1,17,70	78,01	36,43	4,97	87,45	34,33	6,90
		2nd ,,	4,03	35,51	32,89	18,94	1,15,77	81,06	35,40	4,96	90,34	32,18	6,13
22	Coaching train-miles run . No.	1st half	126	1,012	935	574	3,275	3,300	1,046	146	3,824	1,401	215
		2nd ,,	106	1,037	1,001	600	3,352	3,585	1,064	145	3,700	1,367	199
23	Average coaching receipts per train-mile . . . . Rs.	1st half	3·23	3·12	3·64	3·12	3·59	2·36	3·48	3·41	2·29	2·45	3·20
		2nd ,,	3·80	3·42	3·28	3·15	3·45	2·26	3·33	3·41	2·44	2·35	3·09
	UNITS AND UNIT-MILEAGE.												
	Number of units carried one mile (in thousands)—												
24	1st class . . . *Unit-miles*	1st half	46	1,165	1,925	849	4,988	6,315	2,461	292	3,759	1,646	198
		2nd ,,	55	1,103	1,726	863	4,952	7,045	1,987	262	4,022	1,661	200
25	2nd ,, . . . ,,	1st half	268	2,598	12,289	2,135	12,878	26,196	7,769	1,995	10,509	4,758	396
		2nd ,,	308	3,427	10,605	2,157	13,187	30,180	9,592	2,420	12 956	5,539	374
26	3rd or intermediate class ,,	1st half	1,201	6,400	19,516	12,021	51,042	49,216	2,009	4,662	39,450	19,249	192
		2nd ,,	1,371	8,133	18,759	13,356	53,740	48,126	2,229	4,095	42,250	18,713	340
27	4th or lowest ,, ,,	1st half	21,694	214,202	189,343	95,254	672,705	406,448	231,621	27,885	567,994	196,006	28,569
		2nd ,,	20,877	232,018	185,324	91,500	645,615	430,285	231,729	27,594	565,229	191,516	32,769
28	Total passenger unit-mileage,,	1st half	23,209	224,365	223,073	110,259	741,113	488,175	243,860	34,784	621,712	221,659	39,355
		2nd ,,	22,611	244,680	216,414	107,876	717,494	515,606	245,037	34,371	624,457	207,429	33,683
29	Other coaching traffic . *Ton-miles*	1st half	154	1,327	2,951	970	10,191	8,424	2,976	422	5,129	1,750	242
		2nd ,,	168	1,580	2,918	1,462	10,031	7,517	2,425	445	6,077	1,656	343
	Average sum received for carrying a unit one mile—												
30	1st class . . . . *Pies*	1st half	14·40	15·42	10·33	13 58	14·68	11·39	11·92	15·38	11·23	11·71	15 61
		2nd ,,	14·29	14·13	10·25	13 53	15·09	11·63	12·28	15·45	10·66	11·80	15 66
31	2nd ,, ... ,,	1st half	7·43	6·94	4·70	6·61	6·40	4·37	5·21	4·47	4·86	5 39	7·68
		2nd ,,	7·11	6·52	4·96	6 34	6·85	4·34	4·07	4·40	4·39	5·11	7 78
32	3rd or intermediate class . ,,	1st half	3·51	3·28	3 00	2·97	3·27	2·99	4·50	2·50	3·02	3·03	4·45
		2nd ,,	3·43	3·23	3·00	2·93	3·27	2·99	4·50	2·50	2·90	3·03	3 95
33	4th or lowest ,, . ,,	1st half	3·00	2·32	2 26	2·48	2·45	2·15	2·26	2·00	2·27	2·47	2·98
		2nd ,,	3·00	2·36	2·29	2·48	2·42	2·15	2·23	1·99	2·27	2·45	2·94
34	Average for all classes . ,,	1st half	3·10	2·47	2·53	2·70	2·65	2·48	2·47	2 32	2·41	2·65	3·10
		2nd ,,	3·11	2·53	2 54	2·71	2·66	2·49	2·40	2·33	2·41	2·64	3·08
35	Other coaching traffic per ton-mile	1st half	42·53	39·81	30·25	47·19	29·01	34 25	32·57	34 92	34·98	41·28	43·32
		2nd ,,	41·46	39·78	27·77	43·99	31·60	36·12	37·43	33 82	37·38	41·88	41·33

DIX 18—*continued.*

(*by systems*) *during each half-year of 1904*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
18 (*a*) & (*b*)	15 (*a*) to (*d*)	16 (*a*)	4 (*b*) and (*c*).	9 (*c*)	19 (*a*) to (*c*)	12 (*b*)	3 (*g*) to (*l*)	20 (*a*) and (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23 (*a*)	2(*b*)	29 (*a*)	10 (*f*) & (*g*)	2 (*d*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South India n.	Southern Mahratta.	Udaipur Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
24,17	4,90	39,86	20,69	6,47	6,14	26	51,32	4,58	28,68	31,92	49	64	...	252	27	1st half	18
23,91	5,07	42,12	21,68	7,09	6,67	33	56,66	4,08	29,12	34,91	46	1,10	221	224	27	2nd „	
9,69	2,11	16,09	7,38	2,82	2,42	20	18,42	1,63	13,38	9,67	35	19	...	1,12	8	1st half	19
11,77	3,06	17,14	7,97	3,69	2,96	28	19,28	1,86	14,20	11,91	35	32	33	92	10	2nd „	
14,48	2,79	23,77	13,31	3,65	3,72	6	32,90	2,95	15,30	22,25	14	45	...	1,40	19	1st half	20
12,14	2,01	24,98	13,71	3,40	3,71	10	37,38	2,22	14,92	23,00	11	78	1,38	1,32	17	2nd „	
29,67	6,07	38,88	17,79	4,11	5,97	23	39,11	4,16	35,82	19,28	46	23	...	85	23	1st half	21
30,28	6,07	31,52	17,65	3,98	6,04	22	40,34	4,23	37,81	18,49	46	39	1,95	89	19	2nd „	
1,124	146	1,001	578	174	232	10	1,551	163	1,038	740	18	14	...	61	11	1st half	22
1,365	163	962	636	185	253	13	1,600	157	1,211	747	19	22	26	62	14	2nd „	
2·64	4·17	3·88	3·08	2·37	2·57	2·34	2·52	2·58	3·45	2·69	2·53	1·62	...	1·39	2·07	1st half	23
2·39	3·72	3·28	2·77	2·15	2 41	1·67	2·52	2·70	3·12	2·47	2 42	1·75	7·48	1·45	1·36	2nd „	
492	159	1,134	534	151	129	1	1,302	138	989	851	31	6	...	57	3	1st half	24
457	132	1,144	528	174	177	3	935	152	957	875	10	11	112	45	2	2nd „	
1,079	1,135	3,651	1,984	1,294	716	12	3,881	778	4,412	3,091	46	10	...	49	5	1st half	25
1,168	1,016	3,266	2,026	1,732	712	10	3,640	746	4,096	3,015	35	21	216	69	5	2nd „	
4,317	1,357	...	7,472	...	590	8	11,511	265	...	...	96	13	...	...	21	1st half	26
4,454	1,206	...	7,531	...	1,824	17	10,873	263	...	...	...	20	...	46	16	2nd „	
251,376	33,345	221,979	105,833	31,905	44,361	1,366	294,189	27,585	362,401	134,279	3,222	1,398	...	6,332	1,324	1st half	27
237,012	34,982	176,286	98,863	30,019	44,114	1,293	309,477	25,549	318,616	131,981	3,757	3,147	1,867	6,658	1,105	2nd „	
257,254	35,996	226,764	115,823	33,440	45,796	1,367	310,883	28,766	307,602	142,221	3,393	1,927	...	6,438	1,353	1st half	28
243,091	37,345	180,696	108,948	31,925	46,827	1,323	324,925	26,710	323,659	135,871	3,803	3,198	2,195	6,818	1,128	2nd „	
923	234	932	740	181	382	2	2,733	137	845	1,073	29	6	...	17	4	1st half	29
2,166	173	961	1,033	191	299	5	3,132	178	801	1,044	21	14	34	19	4	2nd „	
12·51	11·40	16·01	14 51	11·57	14·19	16·14	14·02	26·48	11·85	15·56	17·92	15·84	...	11·57	15·83	1st half	30
12·58	11·27	15·46	13·93	11·22	14·01	15·78	13·86	29·07	11 74	15·51	17·94	14·31	49·32	11·57	14 71	2nd „	
5·78	5·65	7·90	5·92	4·64	6·30	7·61	6·12	8·51	5·00	6·00	8 96	7·61	...	5·36	7·92	1st half	31
5·85	5 63	7·86	5·61	4·01	6·60	7·48	6·45	10·13	5·76	5·97	8·63	7 84	27·48	5·58	7·53	2nd „	
3·65	4·00	...	3·03	...	2·74	4·50	2·99	4·01	...	...	3·00	4 50	...	...	4·50	1st half	32
3·09	4·00	...	2·97	...	2·80	3·82	2·98	4·01	...	...	...	4·50	...	3·00	4·50	2nd „	
2·00	2·75	3·01	2·50	2·00	2·06	3·00	2·01	2·18	2·03	2·10	1·99	2·00	...	2·25	3·00	1st half	33
2·00	2·75	3·00	2 50	2 00	2·06	3·00	2·01	2·21	2·05	2·10	1·99	2·00	9·00	2·25	3·00	2nd „	
2·05	2·93	3·15	2·65	2·14	2 16	3·06	2·15	2·49	2·11	2·27	2·25	2·09	...	2·36	3·07	1st half	34
2·06	2·90	3·17	2·65	2·16	2·21	3·07	2·13	2·61	2·12	2 27	2 09	2·10	12·87	2·35	3 07	2nd „	
46·00	47·83	38·98	47·03	39·41	40·34	63 21	30·50	61·06	46·48	44 70	41·51	56·94	...	62·71	53·94	1st half	35
37·67	47·59	34·35	49·05	39·16	41·86	31·52	26·70	65·87	48·85	44·69	37·13	51·22	272·72	60·61	51·46	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number.	1 (a)	2 (a)	3 (a) to (f).	4 (a)	5 (a) to (d)	6 (a) to (f)	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	COACHING TRAFFIC—*contd.*												
	UNITS AND UNIT-MILEAGE—*concld.*												
	Average number of units in a train—												
36	1st class . . . . No.	1st half	0·36	1·15	2·06	1·48	1·52	1·91	2·35	0·97	0·98	1·18	0·92
		2nd „	0·52	1·06	1·72	1·44	1·48	1·97	1·87	0·85	1·09	1.21	1·01
37	2nd „ . . . . „	1st half	2·12	2·57	13·13	3·72	3·78	7·94	7·43	6·58	2·75	3·40	1·84
		2nd „	2·91	3·31	10·57	3·59	3·93	8·42	9·02	7·86	3·50	4·05	1·88
38	3rd or intermediate class „	1st half	9·50	6·32	20·86	20·93	15·59	14·91	1·92		10·32	13·74	0·89
		2nd „	12·94	7·84	18·69	22·24	16·03	13·42	2·09	107·17	11·42	13·69	1·71
39	4th or lowest „ „	1st half	171·65	211·56	202·40	166·04	205·38	123·16	221·39	102·86	148·53	139·93	179·50
		2nd „	197·18	223·71	184·61	152·38	192·58	120·01	217·35		152·76	132·75	164·89
40	Total passenger units „	1st half	183·63	221·60	238·45	192·20	226·27	147·92	233·09	114·72	162·58	158·25	183·15
		2nd „	213·55	235·92	215·59	179·65	214·02	143·82	230·33	111·57	168·77	151·70	169·49
41	Other coaching traffic *Tons*	1st half	1·21	1·31	3·15	1·69	3·11	2·55	2·84	1·39	1·34	1·25	1·12
		2nd „	1·59	1·53	2·91	2·44	2·99	2·10	2·28	1·46	1·64	1·21	1·73
	VEHICLES AND VEHICLE-MILEAGE—												
	Number of coaching vehicles hauled one mile (in thousands)—												
42	1st class . . *Vehicle-miles*	1st half	86	1,279	917	599	4,624	4,660	1,429	352	3,609	1,710	324
		2nd „	89	1,270	910	662	4,596	5,058	1,331	384	3,922	1,752	325
43	2nd „ . . „	1st half	126	1,235	2,010	571	5,046	5,555	1,677	365	3,667	1,548	319
		2nd „	133	1,147	2,008	617	5,179	5,846	1,615	402	4,011	1,458	318
44	3rd or intermediate class „	1st half	168	1,160	1,033	1,221	4,978	3,587	237		4,764	1,988	282
		2nd „	166	1,227	831	1,382	5,089	3,676	265	1,678	4,829	2,589	282
45	4th or lowest „ „	1st half	945	9,964	7,584	4,011	29,804	18,552	9,662	1,706	28,875	9,785	2,542
		2nd „	926	10,167	8,229	4,102	33,016	22,319	9,877		29,775	8,901	2,281
46	Other vehicles „	1st half	262	1,043	1,933	985	4,873	5,513	1,347	298	2,950	760	377
		2nd „	243	1,038	1,860	964	5,064	6,185	1,308	160	3,483	789	379
47	Brake-vans „	1st half	176	1,832	1,386	447	5,587	5,857	2,251	333	6,378	2,549	250
		2nd „	149	1,837	1,374	534	5,999	6,094	2,256	364	6,233	2,480	238
48	Total . „	1st half	1,763	16,513	14,863	7,834	54,912	43,724	16,603	3,046	50,243	18,335	4,094
		2nd „	1,706	16,681	15,212	8,161	58,940	49,178	16,647	3,016	52,253	17,969	3,918
	Average number of vehicles in a coaching train—												
49	1st class . . *No.*	1st half	0·68	1·26	0·98	1·04	1·41	1·41	1·37	1·16	0·94	1·22	1·50
		2nd „	0·84	1·22	0·90	1·10	1·37	1·41	1·25	1·25	1·06	1·28	1·63
50	2nd „ . . „	1st half	1·00	1·22	2·15	1·00	1·54	1·68	1·60	1·20	0·96	1·10	1·48
		2nd „	1·26	1·11	2·00	1·03	1·54	1·63	1·52	1·30	1·08	1·07	1·60
51	3rd or intermediate class „	1st half	1·33	1·15	1·10	2·13	1·52	1·09	0·23		1·25	1·42	1·31
		2nd „	1·57	1·18	0·83	2·14	1·52	1·02	0·25	5·54	1·31	1·89	1·42
52	4th or lowest „ „	1st half	7·48	9·84	8·11	6·99	9·10	5·62	9·23	5·54	7·55	6·99	11·80
		2nd „	8·74	9·80	8·20	6·83	9·85	6·23	9·28		8·05	6·51	11·98
53	Other vehicles „	1st half	2·07	1·03	2·07	1·72	1·49	1·67	1·29	0·99	0·77	0·54	1·75
		2nd „	2·29	1·00	1·85	1·60	1·51	1·73	1·23	0·52	0·94	0·58	1·90
54	Brake-vans „	1st half	1·39	1·81	1·48	0·78	1·71	1·78	2·15	1·16	1·67	1·82	1·16
		2nd „	1·41	1·77	1·87	0·89	1·79	1·70	2·12	1·18	1·68	1·81	1·17
55	Total „	1st half	13·95	16·31	15·89	13·66	16·77	13·25	15·87	10·05	13·14	13·09	19·00
		2nd „	16·11	16·03	15·15	13·59	17·58	13·72	15·65	9·79	14·12	13·14	19·70
	Average earnings per coaching vehicle per mile—												
56	1st class . . *Pies*	1st half	7·69	14·05	21·68	19·27	15·84	15·43	20·53	12·78	11·70	11·27	9·56
		2nd „	8·38	12·27	19·45	17·63	16·27	16·20	18·34	10·56	10·94	11·19	9·64
	2nd „ . . „	1st half	15·84	14·59	28·74	24·71	15·69	20·61	24·15	24·46	18·92	16·57	9·51
		2nd „	16·43	19·47	25·20	22·17	17·45	22·40	24·17	26·49	14·19	19·40	9·18
58	3rd or intermediate class „	1st half	25·09	18·11	56·58	29·22	33·52	41·06	38·15		25·03	29·41	3·04
		2nd „	28·34	21·40	67·66	30·57	34·55	39·18	37·83	40·07	26·13	21·87	4·75
59	4th or lowest „ „	1st half	68·87	49·85	56·50	58·96	55·19	47·20	54·20	38·27	44·59	49·43	45·24
		2nd „	67·65	54·57	51·52	55·44	47·40	41·58	52·19		43·04	49·89	40·41
60	Other vehicles „	1st half	24·97	59·62	46·17	46·45	60·68	52·34	71·95	49·33	60·71	94·99	27·79
		2nd „	28·72	60·86	43·55	74·34	62·59	48·89	69·65	95·02	65·23	87·89	37·42

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
13 (*a*) & (*b*)	15 (*a*) to (*d*)	16 (*a*)	4 (*b*) and (*c*)	9 (*c*)	19 (*a*) to (*e*)	12 (*b*)	3 (*g*) to (*l*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23 (*a*)	2 (*b*)	2½ (*a*)	10 (*f*) & (*g*)	2 (*d*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal)	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
0·42	1·09	1·13	0·92	0·53	0·56	0·11	0·84	0·85	0·95	1·15	1·71	0·44	...	0·93	0·27	1st half	36
0·36	0·81	1·19	0·83	0·60	0·70	0·19	0·58	0·97	0·79	1·17	0·56	0·48	4·28	0·72	0·16	2nd ,,	
0·96	7·77	3·65	3·43	4·52	3·06	1·28	2·50	4·77	4·25	4·18	2·47	0·70	..	0·81	0·45	1st half	37
0·92	6·22	3·39	3·18	5·99	2·82	0·78	2·28	4·77	3·38	4·04	1·87	0 95	8·26	1·12	0·49	2nd ,,	
3·84	9·30	...	12·92	...	2·54	0·79	7·42	1·63	...	...	5·25	0·94	...	...	1·94	1st half	38
3·52	7·40	...	11·84	...	7·22	1·27	6·80	1·68	...	...	...	0·89	...	0·75	1·13	2nd ,,	
223·73	228·46	221·73	182·97	111·74	190·92	139·66	189·64	169·33	291·22	186·76	176·22	134 85	...	103·75	119·99	1st half	39
187·87	214·36	183·29	155·35	103·92	174·63	98·38	193·40	163·05	263·08	176·63	199·21	143·26	71·55	107·85	79·00	2nd ,,	
228·96	246·62	226·51	200·24	116·79	197·10	141·84	200·40	176·58	296·42	192·09	185·65	136·93	...	105·49	122·65	1st half	40
192·17	228·79	187·87	171·20	110·51	185·37	100·62	203·06	170·47	267·25	181·84	201·64	145·58	84·09	110·44	80·69	2nd ,,	
0·82	1·60	0·93	1·28	0·63	1·64	0·23	1·76	0·84	0·81	1·45	1·59	0·44	...	0·26	0·37	1st half	41
1·71	1·06	1·00	1·62	0·66	1·19	0·89	1·96	1·13	0·66	1·40	1·11	0·62	1·30	0·30	0·25	2nd ,,	
1,968	243	1,451	795	316	324	8	2,109	221	1,100	1,198	24	23	...	49	6	1st half	42
2,085	234	1,444	795	343	330	11	2,130	235	1,173	1,174	16	34	32	41	5	2nd ,,	
1,760	337	1,691	637	332	351	8	2,033	206	1,341	1,187	22	23	...	17	6	1st half	43
1,876	323	1,652	670	381	350	11	2,082	222	1,427	1,199	17	34	27	27	5	2nd ,,	
2,046	290	...	1,316	...	156	14	903	196	...	...	18	11	...	...		1st half	44
2,013	280	...	1,486	...	444	21	929	185	...	...	...	17	...	12	120	2nd ,,	
17,964	2,069	14,259	5,695	1,886	2,997	89	19,974	2,113	15,831	9,554	219	229	...	469	119	1st half	45
19,177	2,208	13,550	7,278	2,167	3,146	117	20,974	2,071	16,584	9,433	243	408	108	470		2nd ,,	
508	134	1,904	700	182	354	...	1,484	52	1,422	931	15	15		35	4	1st half	46
672	120	864	838	144	305	1	1,352	109	1,741	933	5	35	...	58	5	2nd ,,	
2,340	434	1,341	632	291	346	13	3,868	299	1,253	1,295	56	11	66	68	18	1st half	47
2,652	417	1,284	707	296	343	17	4,006	313	1,269	1,288	51	15		76	18	2nd ,,	
26,606	3,512	19,616	9,645	3,007	5,028	132	30,321	3,027	20,447	14,165	355	312	...	638	154	1st half	48
28,475	3,583	18,794	11,774	3,331	5,415	178	31,473	3,085	23,194	14,027	332	543	283	684	152	2nd ,,	
1·77	1·69	1·45	1·27	1·10	1·40	0·78	1·36	1·36	1·06	1·62	1·29	1·63	...	0·80	0·50	1st half	49
1·65	1·43	1·50	1·25	1·19	1·31	0·81	1·33	1·50	0·97	1·57	0·84	1·56	1·21	0·66	0·37	2nd ,,	
1·57	2·31	1 09	1·16	1·16	1·51	0·77	1·31	1·26	1·29	1·60	1·22	1·63	...	0·28	0·50	1st half	50
1·48	1·98	1·72	1·05	1·32	1 38	0·80	1·30	1·41	1·18	1·61	0·94	1·56	1·04	0·44	0·37	2nd ,,	
1·82	1·99	...	2·15	...	0·67	1·41	0·58	0·83	...	...	0·98	0·81	...	...		1st half	51
1·59	1·71	...	2·33	...	1·76	1·61	0·58	0·83	...	...	...	10·78	...	0·20	10·88	2nd ,,	
15·99	14·18	14·24	9·85	6·59	12·90	9·15	12·88	12·98	14·76	12·90	11·96	16·27	...	7·68	8·53	1st half	52
15·16	13·53	14·09	11·44	7·50	12·46	8·93	13·11	13·22	13·69	13 62	12·79	8·55	4·15	7·61		2nd ,,	
0·45	0·92	0·90	1·21	0·63	1·52	0·01	0·93	0·32	1·37	1·26	0·83	1·04		0·58	0·38	1st half	53
0·53	0·74	0·90	1·32	0·50	1·21	0·05	0·85	0·70	1 44	1·25	0·26	1·59	...	0·94	0·32	2nd ,,	
2·08	2 97	1·34	1·09	1·02	3·64	1·36	2·49	1·84	1·21	1·75	3·09	0·75	2·52	1·11	1·67	1st half	54
2·10	2·56	1·33	1·11	1·02	3·34	1·33	2·50	2·00	1·05	1·72	2·78	0·70		1·22	1·29	2nd ,,	
23·68	24·06	19·62	16·67	10·50	21·64	13·43	19·55	18·39	19·69	19·13	19·41	22·13	....	10·45	13·33	1st half	55
22·51	21·95	19·54	18·50	11·33	21·46	13·53	19·67	19·69	18·33	18·77	17·61	24·74	8·92	11·07	10·67	2nd ,,	
3·04	7·34	12·51	10·55	5·52	5·84	2·23	8·65	16·50	10·65	11·05	23·51	4·33	...	13·50	8·53	1st half	56
2·76	6·38	12·25	9·25	5·70	7·53	3·64	6·08	18·81	9·59	11·56	12·48	4·68	176·26	12·66	6·48	2nd ,,	
3·55	19·03	17·06	18·44	18·09	12·86	12·55	11·68	32·12	16·45	15·62	18·16	3·25	...	15·28	7·00	1st half	57
3·64	17·70	15·55	16·97	18·24	13·46	7·31	11·28	34·11	16·48	15·01	17·31	4·78	218·04	14·38	8·12	2nd ,,	
6·43	18·70	...	18·16	...	10·36	2·52	38·11	7·81	...	...	16·05	5·17	...	...		1st half	58
6·34	17·25	...	15·05	...	11·50	3·02	34·90	7·79	...	...	...	5·17	...	11·19	33·90	2nd ,,	
27·94	44·31	46·83	46·46	33·92	30·46	45·81	29·60	28·50	40·10	30·40	29·26	16·58	...	30·41	28·47	1st half	59
24·09	43·56	39·02	38·96	27·70	28·99	38·05	29·66	27·31	39·32	29·85	30·79	15·44	155·23	31·89		2nd ,,	
83·50	83·72	35·05	49·72	39·12	43·48	...	58·11	161·06	27·61	51·54	79·98	24·31	...	30·69	53·44	1st half	60
121·46	68·46	38·21	60 46	51·77	41·06	...	61·88	106·74	22·49	50·00	165·33	19·91	140·97	19·51	39·95	2nd ,,	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5'6"											
		Number	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (f	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a).
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	COACHING TRAFFIC—*contd.* VEHICLES AND VEHICLE-MILEAGE—*concld.* Carrying capacity hauled one mile (excluding brakes) (in thousands)—												
61	1st class . . . . *Seats*	1st half	1,651	1,260	21,947	12,794	63,875	59,932	12,784	5,029	54,770	36,962	3,771
		2nd „	1,692	11,199	23,181	14,110	63,373	65,955	11,947	5,095	61,721	39,599	3,767
62	2nd „ . . . . „	1st half	2,612	17,498	85,799	13,938	114,052	143,844	29,015	7,756	70,915	32,876	3,722
		2nd „	2,791	15,689	82,345	14,877	116,906	153,116	23,064	8,814	78,670	33,842	3,699
63	3rd or intermediate class . „	1st half	9,207	38,682	47,468	54,088	220,923	193,055	7,582	93,911	165,046	69,047	6,027
		2nd „	9,098	41,425	36,887	56,064	234,674	496,349	8,484	95,473	163,987	96,256	6,059
64	4th or lowest class . . „	1st half	54,028	537,901	422,248	287,842	1,752,660	949,203	555,559		1,525,071	552,919	89,264
		2nd „	51,554	551,303	459,095	232,084	1,920,501	1,126,548	567,929		1,575,287	510,150	84,614
65	Other vehicles . . . *Tons*	1st half	3,010	9,063	9,645	9,439	55,262	28,110	6,418	2,559	35,691	22,312	1,135
		2nd „	4,046	8,008	9,284	9,400	52,051	30,739	6,087	947	50,032	21,468	1,100
	Percentage of freight upon capacity hauled—												
66	1st class . . . *Per cent.*	1st half	2·79	10·35	8·77	6·64	7·81	10·54	19·25	5·82	6·87	4·46	5·26
		2nd „	3·25	9·85	7·45	6·12	7·81	10·68	16·63	5·15	6·52	4·19	5·81
67	2nd „ . . . . „	1st half	10·27	14·86	14·32	15·32	10·85	18·21	26·77	25·72	14·68	14·47	10·63
		2nd „	11·03	21·84	12·88	14·50	11·26	19·71	34·18	27·46	16·47	16·37	10·13
68	3rd or intermediate class „	1st half	13·04	16·54	41·11	22·22	23·10	25·49	26·50	34·60	23·90	27·88	3·19
		2nd „	15·07	19·63	50·85	23·52	22·90	24·51	26·27	33·19	25·00	20·73	5·60
69	4th or lowest class . „	1st half	40·15	39·82	44·84	41·21	38·38	42·82	41·69		37·24	35·45	43·21
		2nd „	40·50	42·09	40·37	39·43	33·62	38·12	40·71		35·89	35·58	38·73
70	Other vehicles . . „	1st half	5·10	14·64	30·59	10·27	18·44	29·97	46·38	16·48	14·35	7·84	21·29
		2nd „	4·16	19·74	31·43	15·56	19·27	24·45	39·83	47·45	12·15	7·71	31·20
	WEIGHT OF TRAIN AND TON-MILEAGE. Gross ton-mileage of all coaching trains (in thousands)—												
71	Freight . . . Ton-miles	1st half	1,553	14,887	16,662	7,662	55,105	28,491	17,862	2,560	42,783	15,210	2,619
		2nd „	1,532	16,374	16,184	8,013	53,543	29,389	17,898	2,570	43,964	14,279	2,380
72	Dead weight . . . . „	1st half	25,853	246,289	231,199	128,666	910,540	711,042	239,779	42,150	767,345	313,861	38,781
		2nd „	24,062	250,587	241,003	136,045	973,104	817,499	212,046	41,906	779,076	315,291	38,116
73	Total . . . . . „	1st half	27,406	261,176	247,861	136,328	965,645	749,533	257,641	44,740	810,128	329,071	41,400
		2nd „	25,595	266 911	257,187	144,058	1,026,647	856,888	259,444	44,476	823,040	329,570	40,496
	Average weight of a coaching train—												
74	Freight . . . . . *Tons*	1st half	12 29	14·70	17·81	13·36	16·62	11·66	17·07	8·44	11·19	10·86	12·16
		2nd „	14·48	15·79	16·12	13·35	15 97	10·97	16·35	8·34	11·88	10 44	11·98
75	Dead weight . . . . . „	1st half	204·55	243·26	247·14	224 28	278·00	215·46	229·19	139·11	200·66	224·07	180·04
		2nd „	227·25	241·57	240·08	226·56	290·27	228·03	227·52	196·63	210 56	230 58	191·80
76	Total . . . . . „	1st half	216 84	257·96	264·95	237·64	294·82	227·12	246·26	147·55	211·85	234 93	192·20
		2nd „	241·73	257·36	256 20	239 91	306·24	239·00	245·87	144·37	222 44	241·02	203·78
77	COST OF WORKING AND PROFITS— Average cost of hauling a coaching train one mile . . Rs.	1st half	1·80	1·20	1·90	2·26	0·96	1·22	1·64	1·28	1·15	1·13	2·59
		2nd „	1 86	1·45	1·88	1·19	0·96	1·40	1·76	1·24	0·97	1·19	2·27
78	Average cost of hauling a coaching vehicle with its load one mile . . . . . *Pies*	1st half	27·47	15·97	25·37	33·72	9·93	20·43	22·96	13·36	19·18	19·33	27·85
		2nd „	24·28	19 42	26·14	17 91	9·53	22·37	24·97	13 04	14·98	20·15	23·48
	Average cost of hauling a coaching unit one mile—												
79	Per passenger unit . . . *Pies*	1st half	1·64	0·96	1·34	1·92	0·74	1·35	1·24	0·93	1·26	1·31	2·48
		2nd „	1·47	1·12	1·47	1·05	0 78	1·62	1·35	0·94	1·02	1·43	2·32
80	Other traffic per ton . . . „	1st half	35·73	10·78	14·39	38·32	5·42	13·77	9·07	8·75	10·84	8·01	39·43
		2nd „	27·07	8·51	14·75	16·25	5·65	16·77	11 71	5·28	8·37	8·86	24·46
81	Average profit on working a coaching train one mile . Rs.	1st half	1·42	1·92	1·74	0·36	2·63	1·14	1·84	2·13	1·14	1·32	0·61
	Average profit on working a coaching vehicle one mile—	2nd „	1·34	1·97	1·40	1·96	2 49	0·86	1·57	2·17	1·47	1·16	0·82
82	1st class . . . . . *Pies*	1st half	*—19 78*	*—1·92*	*—3·69*	*—14·45*	5 91	*— 5·00*	*—2 43*	*— 0·58*	*—7·48*	*—8·06*	*—18·29*
		2nd „	*—15·40*	*—7·15*	*—6·69*	*—0·28*	6·74	*—6 17*	*—6·63*	*—2·48*	*—4·04*	*—3·96*	*—13·84*
83	2nd „ . . . . . „	1st half	*—11 63*	*—1·38*	3·37	*—9·01*	5·76	0·18	1·19	11·10	*—5·26*	*—2·76*	*—18·34*
		2nd „	*— 7·86*	0·05	0·06	4·26	7·92	0·03	*—0·80*	13·45	*—0·79*	*—0·75*	*—14·90*
84	3rd or intermediate class . „	1st half	*— 2·38*	2·14	31·21	*—4·50*	23·59	20 63	15·19	26·71	5·85	10·08	*—24·81*
		2nd „	4 06	1·98	41·52	12·66	25 02	16·81	12·86	25·23	11·15	1·72	*—18·73*
85	4th or lowest class . . . „	1st half	41·40	38·88	31·13	25·24	45·26	26·77	31·24		25·41	30·10	17·39
		2nd „	43 37	35·15	25·38	37 53	37·87	19·21	27·22		28·06	29·74	16·93
86	Other vehicles . . . „	1st half	*—2·50*	34·65	20·20	12·73	50·75	31·91	48·99	35·97	41·53	75·66	*—0·06*
		2nd „	4·44	41 44	17·41	56·43	53·06	21 52	44·68	81·98	50·25	67·74	13·94

DIX 18—*continued.*

(*by systems*) *during each half-year of 1904*—contd.

do not prepare these statistics.

18 (a) & (b)	15 (a) to (d)	16 (a)	4 (b) & (c).	9 (c)	19 (a) to (c)	(12) b	3 (g) to (i)	20 (a) & (b)	21 (a) to (f)	23 (a) to (h)	23 (a)	2 (b)	39 (a)	10 (f) & (g)	2 (d)	Gauge. Number.	Serial number.
2' 3½"												2' 6"					
Bengal and North-Western.	Bhaunagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
18,003	2,539	8,914	8,296	6,253	3,486	84	21,306	2,657	10,213	9,766	274	69	...	458	33	1st half	61
19,290	2,398	14,320	9,208	6,291	3,519	114	21,211	2,349	10,910	9,563	206	103	329	463	31	2nd ,,	
27,037	4,746	17,140	7,682	7,677	4,255	84	24,401	2,073	14,053	14,729	269	69	...	207	33	1st half	62
28,439	4,288	30,010	8,145	8,504	4,196	114	24,963	3,127	14,955	14,889	212	103	462	335	33	2nd ,,	
44,415	3,936	...	28,784	...	4,023	306	22,621	2,774	...	...	431	46	...	...	} 3,762	1st half	63
43,124	4,171	...	29,476	...	10,605	477	23,286	2,697	...	...	...	68	...	360	} 3,705	2nd ,,	
518,671	61,447	419,801	163,769	84,654	96,358	3,183	655,961	71,980	456,087	307,027	6,298	5,694	...	10,518		1st half	64
544,645	65,545	406,089	207,976	94,432	98,222	4,225	690,211	70,354	530,684	304,052	7,016	10,482	2,598	10,891		2nd ,,	
1,615	550	3,611	3,853	1,065	4,291	...	3,060	246	3,353	2,706	61	3	...	86	2	1st half	65
2,947	467	3,081	4,667	628	3,665	1	7,595	451	4,186	2,709	19	8	263	172	2	2nd ,,	
2·67	6·27	12·48	6·45	2·41	3·70	1·25	6·11	5·19	9·68	8·72	11·37	9·10	...	12·46	8·96	1st half	66
2·37	5·52	7·99	5·78	2·77	5·04	2·15	4·41	6·46	8·78	9·15	5·09	10·22	28·72	9·63	7·31	2nd ,,	
3·99	23·91	21·30	25·82	16·85	16·68	14·39	15·91	37·53	31·44	20·99	16·84	14·24	...	23·74	14·72	1st half	67
4·11	23·69	10·58	24·37	20·12	16·98	9·06	14·57	23·88	27·32	20·25	16·71	20·30	44·74	19·48	17·96	2nd ,,	
9·72	34·48	...	31·42	...	14·65	2·53	50·89	9·55	...	...	22·28	28·74	...	...	} 35·49	1st half	68
10·33	28·96	...	25·55	...	17·20	3·50	46·49	9·75	...	...	...	28·73	...		} 30·25	2nd ,,	
48·47	54·27	52·88	64·62	37·80	46·04	42·91	44·85	38·32	62·21	45·04	51·15	33·33	...	60·20		1st half	69
43·52	33·38	43·41	47·54	31·79	44·91	30·61	44·84	36·31	60·04	43·38	53·55	30·02	71·87	61·53		2nd ,,	
57·13	42·58	25·62	19·21	16·64	8·90	...	33·90	55·74	25·20	39·62	48·16	177·90	...	19·97	115·84	1st half	70
73·49	36·98	31·21	22·14	30·45	8·17	...	41·24	39·40	19·14	38·53	111·32	161·98	12·92	10·84	161·76	2nd ,,	
16,399	2,423	14,657	7,751	2,219	3,149	86	21,511	1,684	19,441	9,702	235	122	...	407	85	1st half	71
16,798	2,459	11,914	7,632	2,148	3,130	85	22,737	1,801	20,340	9,291	250	206	175	481	71	2nd ,,	
188,924	22,046	180,639	72,261	33,792	39,322	1,361	227,490	21,124	155,095	111,721	2,960	2,083	...	3,843	615	1st half	72
205,091	22,555	172,92	86,028	36,836	42,209	1,609	237,910	21,914	171,717	111,545	2,844	3,508	1,869	3,466	656	2nd ,,	
205,323	24,469	195,296	80,012	36,011	42,471	1,447	249,001	23,008	174,536	121,423	3,195	2,205	...	4,252	700	1st half	73
221,884	25,294	184,534	93,660	38,474	45,339	1,694	260,647	23,715	192,057	120,836	3,094	3,774	2,044	3,897	727	2nd ,,	
14·59	16·60	14·64	13·40	7·75	13·55	2·77	13·87	11·16	18·72	13·10	12·85	8·68	...	6·67	7·75	1st half	74
13·23	14·94	12·39	11·99	7·43	12·39	6·45	14·21	11·49	16·80	12·43	13·26	9·39	6·68	6·98	5·11	2nd ,,	
168·15	151·04	180·44	124·93	118·01	169·23	139·16	146·64	129·67	149·36	150·90	161·88	147·96	...	68·61	55·74	1st half	75
163·18	140·02	179·79	135·16	125·75	167·09	122·43	148·68	139·86	141·78	149·28	150·75	162·43	71·63	56·15	46·91	2nd ,,	
182·74	167·64	195·08	138·33	125·76	182·78	147·98	160·51	141·24	168·08	164·00	174·73	156·64	...	69·68	63·49	1st half	76
175·41	154·96	192·18	147·17	133·18	179·48	128·84	162·89	151·35	158·58	161·71	164·01	171·82	78·31	63·13	32·02	2nd ,,	
0·86	1·45	1·61	1·28	1·62	1·04	2·09	1·19	1·00	1·29	1·31	1·93	1·34	...	1·85	0·71	1st half	77
0·93	1·88	1·78	1·25	1·99	1·17	1·75	1·21	1·19	1·17	1·59	1·87	1·46	3·19	1·50	0·73	2nd ,,	
7·67	13·19	16·88	15·73	19·92	11·10	33·12	13·37	11·46	13·39	14·43	22·83	12·03	...	37·95	11·09	1st half	78
8·76	18·18	18·79	18·33	23·33	12·41	27·56	13·48	12·87	13·03	17·95	24·08	11·63	68·72	29·19	14·57	2nd ,,	
0·71	1·07	1·29	1·09	1·52	0·90	2·82	1·07	1·06	0·77	1·20	1·38	1·81	...	3·18	1·07	1st half	79
0·90	1·51	1·72	1·23	2·09	1·13	3·32	1·07	1·28	0·77	1·55	1·73	1·79	5·32	2·34	1·06	2nd ,,	
4·65	8·90	18·14	21·69	18·53	14·77	...	8·18	6·17	21·98	18·82	13·97	21·77	...	68·38	13·45	1st half	80
3·57	14·79	19·36	19·11	21·62	13·16	...	7·33	9·01	27·33	17·51	8·16	29·64	127·03	98·14	21·93	2nd ,,	
1·78	2·72	2·27	1·80	0·75	1·53	0·23	1·33	1·56	2·16	1·29	0·60	0·23	...	*—0·46*	1·36	1st half	81
1·46	1·84	1·50	1·52	0·16	1·24	0·08	1·31	1·51	1·95	0·88	0·55	0·29	4·29	*—0·05*	0·63	2nd ,,	
—4·63	*—5·85*	*—4·37*	*—5·18*	*—14·40*	*—5·46*	*—30·89*	*—4·72*	5·04	*—2·74*	*—3·38*	0·68	*—7·70*	...	*—24·45*	*—2·56*	1st half	82
—6·00	*—12·20*	*—5·54*	*—4·58*	*—17·63*	*—4·88*	*—23·92*	*—7·40*	5·94	*—3·44*	*—6·39*	*—12·00*	*—6·95*	105·55	*—16·53*	*—3·09*	2nd ,,	
—4·12	5·84	0·18	2·71	*—1·83*	1·76	*—20·57*	*—1·69*	20·66	3·06	1·19	*—4·67*	*—8·78*	...	*—22·67*	*—4·00*	1st half	83
—5·12	*—0·88*	*—3·24*	3·14	*—5·09*	1·05	*—20·25*	*—2·20*	21·24	3·45	*—2·94*	*—6·77*	*—6·85*	149·33	*—14·81*	*—6·45*	2nd ,,	
—1·24	5·51	...	2·43	...	*—0·74*	*—30·60*	24·74	*—3·65*	...	...	*—6·78*	*—6·86*	...	...	} 22·81	1st half	84
—1·93	*—1·33*	...	1·22	...	*—0·91*	*—24·54*	21·42	*—5·06*	...	...	...	*—6·46*	...	*—18·00*	13·90	2nd ,,	
20·27	31·12	29·95	30·73	14·00	19·36	12·69	16·23	17·04	26·71	15·97	6·43	4·55	...	*—7·54*		1st half	85
15·93	25·00	20·23	20·13	4·37	16·58	5·49	16·18	14·44	26·29	11·40	6·71	3·81	86·52	2·70		2nd ,,	
75·23	70·53	18·17	33·99	19·20	32·38	...	44·74	149·60	14·22	37·11	57·15	12·28	...	*—7·26*	42·35	1st half	86
112·70	49·38	19·42	46·63	28·44	28·65	...	48·40	93·67	9·46	32·05	141·25	8·28	72·27	*—0·68*	25·38	2nd ,,	

APPEN

Analysis of working of each railway

NOTE.—Railway not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number.	1 (a)	2(a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (f).	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	COACHING TRAFFIC—*concld.* COST OF WORKING AND PROFITS—*concld.* Average profit on working a coaching unit one mile—												
87	Per passenger unit . . *Pies*	1st half	1·46	1·49	1·19	0·78	1·91	1·13	1·23	1·39	1·15	1·34	0·62
		2nd „	1·64	1·41	1·97	1·86	1·88	0·87	1·05	1·39	1·39	1·21	0·76
88	Other traffic per ton . . „	1st half	6·85	29·03	15·86	8·87	23·59	20·48	23·50	26·17	24·14	33·27	3·89
		2nd „	14·39	31·27	13·02	32·74	25·95	19·35	25·72	23·54	29·01	33·02	16·87
	GOODS TRAFFIC. GROSS RECEIPTS AND TRAIN MILEAGE— (*In thousands.*)												
89	Receipts from goods traffic . R	1st half	1,61	63,42	70,61	21,01	2,76,31	2,41,82	55,83	17,75	2,13,43	41,14	5,50
		2nd „	4,97	45,85	52,49	43,66	2,64,80	1,77,34	56,99	16,73	2,56,08	34,56	8,98
90	Goods train-miles run . . No.	1st half	65	1,503	666	406	5,143	4,480	1,388	342	4,636	1,089	305
		2nd „	1,31	1,353	500	574	4,617	3,787	1,389	323	4,939	9,66	416
91	Average goods receipts per train-mile . . . . R	1st half	2·48	4·22	10·60	5·18	5·37	5·40	4·03	5·19	4·60	3 78	1·80
		2nd „	3·80	3 39	10·49	7·61	5·74	4·68	4·10	5 02	5·19	3·58	2·16
	UNITS AND UNIT-MILEAGE. (*In thousands.*)												
92	Tons of goods carried one *Ton-mile* . . . . . *miles.*	1st half	4,586	236,200	173,527	63,577	1,298,985	696,234	161,410	55,664	889,691	160,329	19,747
		2nd „	12,019	174,236	136,640	102,303	1,273,067	571,576	168,863	52,044	1,054,568	147,708	30,746
93	Average sum received for carrying a ton one mile . *Pies*	1st half	6·72	5·16	7·81	6·34	4·08	6·67	6·65	6·12	4·61	4·93	5·35
		2nd „	7·93	5·05	7·37	8·19	3·99	5·96	6·43	6·17	4·66	4·49	5·61
94	Average number of tons in a train . . . . . *Tons*	1st half	70·75	157·10	260·60	156·70	252·58	155·40	116·29	125·73	191·92	147·17	64·81
		2nd „	91·86	128·80	273·18	178·36	275 74	150·94	121·56	120·53	213·51	152·92	73·99
	VEHICLES AND VEHICLE-MILEAGE— Number of goods vehicles hauled one mile— (*In thousands.*)												
95	Loaded . . . *Vehicle-miles*	1st half	756	23,764	20,523	9,298	115,442	83,355	23,614	5,138	92,186	22,244	3,302
		2nd „	1,988	20,083	16,477	13,568	114,072	67,073	23,712	4,580	102,117	19,450	5,220
96	Empty . . . . „	1st half	283	10,889	5,914	2,499	61,781	29,716	9,084	2,970	33,439	7,580	1,376
		2nd „	1,500	9,133	3,829	5,847	60,739	23,446	9,620	2,922	42,515	5,327	2,151
97	Brake-vans . . . „	1st half	63	3,063	453	406	4,957	8,783	2,135	623	4,665	1,077	312
		2nd „	137	2,665	362	574	4,777	7,096	2,245	574	5,193	896	419
98	Total . . . . „	1st half	1,102	37,716	26,895	12,203	182,180	121,859	34,833	8,731	130,290	30,901	4,990
		2nd „	3,615	31,881	20,668	19,989	179,588	97,615	35,577	8,076	149,825	25,673	7,790
	Average number of vehicles in a goods train—												
99	Freight vehicles . . . *No.*	1st half	16·03	23·04	39·71	29·08	34·46	25·24	23·56	18·31	27·10	27·37	15·36
		2nd „	26 66	21·60	40·60	33·85	37·86	23·91	23·99	17 37	29·28	25·65	17·74
100	Brake-vans . . . . „	1st half	0·97	2 01	0·63	1·00	0 96	1·96	1 54	1·41	1·01	0 99	1·02
		2nd „	0·97	1 97	0 72	1·00	1 04	1·87	1·62	1·33	1·05	0·98	1·01
101	Total . . . . . „	1st half	17·00	25·08	40·39	30·08	35·42	27·20	25·10	19·72	28·11	28·36	16 38
		2nd „	27·63	23·57	41 32	34·85	38·90	25·78	25·61	18·70	30·33	26·58	18·75
102	Average earnings per goods vehicle per mile (excluding brakes) . . . . *Pies*	1st half	29·68	35·14	51·27	34 19	29·93	41·06	32 81	42·04	32·62	26·49	22·57
		2nd „	27·34	31 13	49·63	43·17	29·08	37·62	32·63	42·81	34·00	26·78	23,39
103	Carrying capacity hauled one mile (excluding brakes) . *Tons*	1st half	15,166	520,917	359,669	151,886	2,524,852	1,586,906	458,856	116,093	1,806,425	376,287	44,292
		2nd „	50,847	444,148	277,913	249,567	2,515,578	1,277,435	466,216	107,931	2,098,527	311,139	69,401
104	Percentage of freight upon capacity hauled . . . *Per cent.*	1st half	30·24	45·34	48·25	41·86	51·45	43·87	33·02	47·95	49·25	42·61	44·58
		2nd „	23·64	39 23	49 17	40·99	50 61	44·74	36·22	48·22	50·25	47·47	44 30
105	Average load of a goods vehicle (including both loaded and empty) per mile . . *Tons*	1st half	4·41	6·82	6·56	5·39	7·33	6·16	4·94	6·87	7·08	5·38	4·22
		2nd „	3·45	5·96	6·73	5·27	7·28	6 31	5·07	6·94	7·29	5·96	4·17
106	Average load of a loaded goods vehicle per mile . „	1st half	6·06	9·94	8·45	6·84	11.25	8·35	6·84	10·83	9·65	7·21	5·98
		2nd „	6·05	8 68	8 29	7·54	11·16	8 52	7·12	11·36	10·33	7·59	5·89
	WEIGHT OF TRAIN AND TON-MILEAGE— Gross ton-mileage of all goods trains— (*In thousands.*)												
107	Freight . . . . . *Tons*	1st half	4,586	236,200	173,527	63,577	1,298,985	696,284	161,410	55,664	889,691	160,329	19,747
		2nd „	12,019	174,236	136,640	102,303	1,273,067	571,576	168,863	52,044	1,054,568	147,708	30,746
108	Dead weight . . . . . „	1st half	12,211	385,591	221,946	120,076	1,704,129	1,220,659	343,411	90,369	1,243,064	283,408	31,696
		2nd „	35,555	335,936	170,703	191,415	1,647,853	996,621	350,115	84,631	1,406,807	239,008	49,165
109	Total . . . . . „	1st half	16,797	621,791	395,473	183,653	3,003,114	1,916,893	504,821	146,033	2,132,755	443,737	51,443
		2nd „	47,574	510,172	307,343	293,718	2,920,920	1,568,197	518,978	136,675	2,461,375	386,716	79,911

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
13 (a) & (b)	15 (c) to (d)	16 (a)	4 (b) and (c)	9 (c)	19 (a) to (c)	12 (b)	3 (g) to (l)	20 (a) & (b)	21 (a) to (f)	22 (a) to (h)	23 (a)	2 (b)	29 (a)	10 (f) & (g)	2 (d)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Maratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Kushalgarh Kohat-Thal and Nowshera Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
1·34	1·86	1·86	1·56	0·62	1·26	0·24	1·08	1·43	1·34	1·07	0·37	0·28	...	—0·82	2·00	1st half	87
1·16	1·29	1·45	1·42	0·07	1·08	—0·25	1·06	1·33	1 35	0·72	0·36	0·31	7·55	0·01	1·41	2nd ,,	
41·35	38·93	15·84	25·34	20·88	25·57	...	22·32	54·21	24·50	30·88	27·54	35·17	...	—5·67	40·49	1st half	88
34·10	32·90	14·99	29·94	17·54	28·70	...	19·37	56·86	21·52	37·18	28·37	21·58	145·68	—37·53	29·53	2nd ,,	
39,83	6,73	42,19	19,21	7,80	9,68	4	73,77	616	29,18	39,09	32	70	...	44	27	1st half	89
26,85	2,92	35,82	24,66	5,43	8,19	7	76,28	394	29,19	29,37	23	97	1,41	76	19	2nd ,,	
1,115	153	1,305	611	244	297	3	1,604	198	1,021	1,344	8	31	...	87	18	1st half	90
916	84	1,212	588	186	271	5	1,759	148	1,020	1,199	7	59	61	88	16	2nd ,,	
3·57	4·39	3·23	3·26	3·20	3·25	1·38	4·60	3·11	2·86	2·91	4·02	2·22	...	0·51	1·49	1st half	91
2·93	3·45	2·88	4·20	2·91	3·02	1·32	4·34	2·66	2·86	2·45	3·50	1·65	2·33	0 86	1·17	2nd ,,	
137,328	11,583	107,547	55,721	16,520	25,882	106	210,580	18,822	77,173	109,593	297	2,216	...	949	774	1st half	92
93,960	5,584	95,435	55,734	11,783	22,756	205	244,939	11,468	76,032	85,866	230	3,471	697	1,593	574	2nd ,,	
5·57	11·16	7·53	6·56	9·06	7·18	7·60	6·73	6·29	7·26	6·85	20·86	6·04	...	8·87	6·74	1st half	93
5·49	10·03	7·21	8·49	8·84	6 91	6·37	5·98	6·60	7 37	6 57	19·48	5·38	38·80	9·15	6 43	2nd ,,	
123·14	75·56	82·44	91·21	39·66	87 04	34·78	131·28	95·11	75·59	81·52	37·04	70·83	...	10·94	42·35	1st half	94
102·56	56·08	76·83	94·86	31·35	83·92	39·73	139·25	77·30	74·53	71·59	34·53	59·02	11·51	18·00	34·88	2nd ,,	
23,946	3,079	21,054	13,020	2,994	4,815	33	39,567	2,892	15,717	23,744	104	338	...	485	133	1st half	95
18,008	1,475	20,093	14,354	2,429	4,353	49	41,878	2,094	16,058	20,190	81	629	189	667	87	2nd ,,	
9,254	1,269	9,047	2,837	1,246	2,313	10	9,687	1,732	5,619	6,396	51	150	...	188	77	1st half	96
7,188	821	8,603	3,671	968	1,852	24	13,630	1,104	5,504	5,830	37	261	57	221	37	2nd ,,	
1,613	151	1,848	609	521	73	5	1,508	291	772	1,750	...	18	...	70	21	1st half	97
1,318	64	1,784	595	436	69	8	1,684	227	931	1,595	...	24	...	89	22	2nd ,,	
34,813	4,499	31,949	16,466	4,761	7,201	48	50,962	4,915	22,108	31,890	155	506	...	743	231	1st half	98
26,464	2,360	30,480	18,620	3,833	6,274	81	57,192	3,425	22,583	27,615	118	914	246	977	146	2nd ,,	
29·77	28·36	23·07	25·96	10·18	23·97	13·98	30·83	23·36	20·90	22·42	19·39	15·60	...	7·76	11·47	1st half	99
27·45	27·18	23·10	30·68	9·18	22·88	14·19	31·56	21·55	21·23	21·69	17·73	15·12	4·06	10·04	7·57	2nd ,,	
1·45	0·99	1·42	0·99	1·25	0·24	1·67	0·94	1·43	0·75	1·30	...	0·56	...	0·81	1·19	1st half	100
1·44	0·75	1·44	1·01	1·18	0·25	1·65	0·96	1·53	0·91	1·33	...	0·41	...	1·00	1·34	2nd ,,	
31·22	29·35	24·49	26·95	11·43	24·21	15·65	31·77	24·79	21·65	23·72	19·39	16·16	...	8·57	12·66	1st half	101
28·39	27·93	24·54	31·69	10·36	23 13	15·84	32·52	23·08	22·14	23·02	17·73	15·54	4·06	11·04	8·91	2nd ,,	
23·03	29·73	26·91	24·11	35·31	26·60	18·91	28·64	25·59	26·26	24·90	39·84	27·42	...	12·52	24·91	1st half	102
20·50	24·39	23·97	26 26	30·68	25·36	17·84	26·38	23·66	25·89	21·67	37·92	20·99	103·87	16·40	29·63	2nd ,,	
273,417	27,987	229,135	120,975	44,670	64,361	412	427,092	46,542	149,402	213,903	1,264	2,912	...	2,572	1,116	1st half	103
232,963	15,928	222,654	156,881	35,833	55,204	691	483,958	34,087	153,497	184,404	940	5,274	41·42	3,935	649	2nd ,,	
50·23	41·39	46 94	46·06	36·98	40 33	23·85	49·31	40·44	51·65	51·24	22·46	76·11	...	36·90	69·41	1st half	104
40·33	36 43	42·86	35·53	32·91	41·22	29·59	50·61	33·64	49·53	46·56	24 50	65·80	48·36	40 47	88·34	2nd ,,	
4·14	2·66	3·57	3·51	3·90	3·63	2·49	4·26	4·07	3·62	3·64	1·90	4·54	...	1·41	3·69	1st half	105
3·74	2·43	3·33	3 09	3·47	3 67	2·80	4·41	3·59	3·51	3·30	1·94	3·90	2·83	1·79	4·61	2nd ,,	
5·73	3·76	5·11	4·28	5·52	5·38	3·21	5·32	6·51	4·91	4·62	2·85	6·56	...	1·96	5·82	1st half	106
5·22	3·78	4·75	3 88	4·85	5·23	4·16	5·85	5·48	4·73	4·25	2·85	5·52	3·64	2·59	6·57	2nd ,,	
137,328	11,583	107,547	55,721	16,520	25,882	106	210,580	18,822	77,173	109,593	296	2,216	...	949	774	1st half	107
93,960	5,584	95,435	55,734	11,783	22,756	205	244,939	11,468	76,032	85,866	230	3,471	697	1,593	574	2nd ,,	
169,642	20,649	180,936	88,445	30,162	39,258	304	234,242	22,857	122,323	169,616	918	3,093	...	4,327	914	1st half	108
134,748	11,006	174,024	105,325	23,736	34,155	515	260,279	16,888	125,775	147,529	727	5,793	2,692	3,953	667	2nd ,,	
306,970	32,232	288,483	144,166	46,682	65,140	410	444,822	41,709	199,496	279,209	1,214	5,306	...	5,276	1,688	1st half	109
228,703	16,590	269,459	161,059	35,519	56,911	720	505,218	28,356	201,807	233,395	958	9,264	3,389	5,546	1,241	2nd ,,	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*f*)	7 (*a*) to (*c*)	9 (*a*) & (*b*)	10 (*a*) to (*e*)	11 (*a*) & (*b*)	12 (*a*)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	GOODS TRAFFIC—*concld.*												
	WEIGHT OF TRAIN AND TON-MILEAGE—*concld.*												
	Average weight of a goods train—												
110	Freight . . . . Tons	1st half	70·75	157·10	260·60	156·70	252·58	155·40	116·29	125·73	191·92	147·17	64·81
		2nd „	91·86	128·80	273·18	178·36	275·74	150·94	121·55	120·53	215·51	152·92	73·99
111	Dead-weight . . . . „	1st half	188·39	256·47	333·31	295·95	331·36	272·46	247·43	204·11	268·14	260·15	104·03
		2nd „	271·73	248·53	341·29	333·72	356·92	263·19	252·03	195·99	284·83	247·44	118·31
112	Total . . . . „	1st half	259·14	413·57	593·91	452·65	583·94	427·86	363·72	329·84	460·06	407·32	168·84
		2nd „	363·59	377·13	614·47	512·08	632·66	414·13	373·58	316·52	498·34	400·36	192·30
	COST OF WORKING AND PROFIT.												
113	Average cost of hauling a goods train one mile . . Rs	1st half	2·15	1·93	4·27	4·31	1·89	2·30	2·42	1·79	2·49	1·97	2·27
		2nd „	2·30	2·12	4·50	2·53	1·99	2·43	2·69	1·66	2·17	1·97	2·14
114	Average cost of hauling a goods vehicle with its load one mile . . . . *Pies*	1st half	25·72	16·11	20·64	28·44	10·54	17·50	19·74	14·49	17·63	13·79	28·43
		2nd „	20·14	18·86	21·29	14·35	10·07	19·48	21·56	14·17	14·26	14·78	23·17
115	Average cost of hauling a goods unit (*viz.*, one ton) one mile . . . . „	1st half	5·83	2·36	3·14	5·28	1·44	2·84	4·00	2·11	2·49	2·57	6·74
		2nd „	5·84	3·16	3·16	2·72	1·38	3·09	4·26	2·04	1·96	2·48	5·55
115 A	Average cost of hauling a goods unit one mile, including interest on capital expended on open line at the rate of 5 per cent. per annum. . . . . „	1st half	9·85	5·82	5·87	8·74	2·87	5·08	7·97	5·04	4·67	5·16	16·25
		2nd „	8·47	7·56	6·23	5·26	2·82	5·57	8·10	5·14	3·88	5·15	12·93
116	Average profit on working a goods train one mile . Rs	1st half	0·33	2·29	6·33	0·87	3·43	3·10	1·61	3·40	2·11	1·81	—0·47
		2nd „	1·00	1·27	5·99	5·08	3·75	2·25	1·41	3·36	3·02	1·61	0·02
117	Average profit on working a goods vehicle with its load one mile . . . *Pies*	1st half	3·96	19·03	30·63	5·75	19·39	23·56	13·07	27·55	14·99	12·70	—5·26
		2nd „	7·20	12·27	28·34	28·32	19·01	18·14	11·27	28·64	19·74	12·00	0·22
118	Average profit on working a goods unit (*viz.*, one ton) one mile . . . . „	1st half	0·89	2·80	4·67	1·06	2·64	3·83	2·65	4·01	2·12	2·36	—0·39
		2nd „	2·09	1·89	4·21	5·47	2·61	2·87	2·22	4·13	2·70	2·01	0·06
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.												
	Percentage on Total Earnings—												
119	Coaching traffic . . *Per cent.*	1st half	63·26	31·73	31·71	41·56	29·41	24·17	38·14	21·12	28·64	41·59	52·15
		2nd „	44·07	41·23	37·67	28·82	29·91	30·99	37·26	21·55	25·79	44·06	37·61
120	Goods traffic . . . . „	1st half	24·85	63·70	65·76	48·78	69·05	74·91	58·50	75·45	69·89	49·84	41·57
		2nd „	54·37	53·25	60·12	66·44	68·40	67·80	58·98	72·73	73·10	47·30	55·05
121	Sundries, including telegraph . . . . „	1st half	11·89	4·34	2·53	9·66	1·25	0·92	3·36	3·43	1·47	8·57	5·48
		2nd „	1·56	5·30	2·21	4·74	1·33	1·21	2·76	5·72	1·11	8·64	6·79
122	Steam-boat earnings . „	1st half	...	0·23	...	...	0·29	...	...	...	...	...	0·85
		2nd „	...	0·22	...	...	0·36	...	...	...	...	...	0·55
	Total . „	1st half	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
		2nd „	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
	Percentage of working Expenses on Total Earnings—												
123	Maintenance . . . *Per cent.*	1st half	18·11	9·33	8·16	17·07	8·24	7·79	15·67	9·34	16·95	13·86	35·01
		2nd „	21·45	13·20	9·92	6·78	7·59	10·81	16·39	8·32	9·74	12·11	29·75
124	Locomotive expenses . „	1st half	13·82	13·60	18·19	29·42	10·13	20·16	20·12	10·94	20·60	15·41	21·81
		2nd „	10·22	15·83	18·62	9·42	10·00	23·65	23·28	11·18	19·03	17·64	19·48
125	Carriage and wagon expenses . . . „	1st half	4·69	3·31	6·17	7·05	2·41	4·63	4·41	4·00	5·82	7·19	5·85
		2nd „	2·98	4·55	5·86	3·39	2·63	5·20	5·37	3·60	3·13	6·94	6·32
126	Traffic expenses . . „	1st half	11·22	8·60	6·97	15·16	7·08	7·16	7·60	5·52	6·68	9·06	12·96
		2nd „	9·97	9·50	7·69	11·18	7·36	8·72	7·86	5·66	6·51	10·51	12·89
127	General charges . . „	1st half	13·19	6·18	4·39	5·51	2·93	3·41	4·83	4·89	2·85	3·91	20·06
		2nd „	9·54	7·17	4·74	3·57	3·16	4·24	5·41	5·25	2·39	4·39	15·60
128	Miscellaneous expenses „	1st half	7·52	2·89	1·25	2·57	2·58	2·18	2·60	2·15	1·19	3·58	4·25
		2nd „	9·06	3·27	2·09	3·31	2·61	2·90	2·98	1·49	1·06	2·06	4·92
129	Steam-boat expenses . „	1st half	...	0·54	...	...	0·27	...	...	...	0·02	...	0·90
		2nd „	...	0·68	...	...	0·27	...	...	...	0·05	...	0·78
130	TOTAL WORKING EXPENSES „	1st half	68·55	44·45	45·13	76·78	33·64	45·33	55·23	36·84	53·81	53·01	100·84
		2nd „	63·17	54·20	49·12	37·65	35·62	55·52	61·29	35·50	41·91	53·65	89·74

DIX 18—*continued.*

***(by systems) during each half-year of 1904*—contd.**

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
13 (*a*) & (*b*)	15 (*a*) to (*d*)	16 (*a*)	4 (*b*) & (*c*)	9 (*c*)	19 (*a*) to (*c*)	12 (*b*)	3 (*g*) to (*b*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23 (*a*)	2 (*b*)	29 (*a*)	10 (*f*) & (*g*)	2 (*d*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal)	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half years.	
123·15	75·56	82·44	91·21	39·66	87·04	34·78	131·28	95·11	75·59	81·52	87·04	70·83	...	10·94	42·35	1st half	110
102·56	66·08	76·84	94·35	31·85	83·92	39·73	139 25	77·30	74·53	71·59	84·53	59·02	11·51	18·00	34·88	2nd „	
152·12	134·70	138·69	144·78	72·40	132·01	99·32	146·03	115·65	119·81	126·16	114·66	98·79	...	49·88	49·98	1st half	111
147·07	130·26	140·19	179·26	64·17	125·96	100·05	147·98	113·82	123·29	123·00	109·04	98·50	44·41	44·67	40·56	2nd „	
275·27	210·26	221·13	235·99	112·06	219·05	134·10	277·31	210·76	195·40	207·68	151·70	169·62	...	60·82	92·33	1st half	112
249·63	196·34	216·94	274·11	96·02	209·88	139·78	287·23	191·12	197·82	194·59	143·57	157·52	55·92	62·67	75·44	2nd „	
1·30	1·82	1·82	2·18	1·50	1·25	1·90	2 05	1·49	1·50	1·65	1·68	1·45	...	2·46	1·03	1st half	113
1·32	2·38	2·01	2·33	1·83	1·37	1·90	2·13	1·50	1·46	1·92	1·63	1·34	2·28	1·49	1·05	2nd „	
8·38	12·30	15·16	16·11	16·54	10·06	26·03	12·77	12·26	13·77	14·17	16·65	17·85	...	39·89	17·26	1st half	114
9·27	16·80	16·71	14·60	19·25	11·48	25·69	12·93	13 34	13·23	16·97	17·72	16·94	107·66	65·07	26·76	2nd „	
2·03	4·62	4·24	4·59	4·25	2·76	10·46	3·00	3·01	3·81	3·90	8·71	3·93	...	28·28	4·67	1st half	115
2 48	6·91	3·03	4·72	5·55	3·13	9·18	2·93	3·72	3·77	5 14	9·11	4·34	38·02	15·86	5·81	2nd „	
4·35	9·95	7·74	8·44	8·56	4·03	...	5·17	5·34	7·00	7·84	42·19	12·77	...	51·45	10·78	1st half	115 A.
5·39	14·60	8·98	8 55	10·72	5·59	...	4·86	6·95	7·20	10·41	52·16	13·69	66·49	30·72	14·20	2nd „	
2·27	2·57	1·41	1·08	1·70	2·00	*—0·52*	2·55	1·62	1·36	1·26	2·34	*—0·77*	...	*—1·95*	0·46	1st half	116
1·61	1 07	0·87	1·87	1·08	1·65	*—0·58*	2·21	1·16	1·40	0·53	1·87	0·31	0·05	*—0·63*	0·12	2nd „	
14·65	17·43	11·75	8·60	13·77	16·54	*—7·12*	15·87	13·33	12·49	10·73	23·19	9·57	...	*—27·37*	7·65	1st half	117
11·23	7·59	7·26	11·66	11·43	13·88	*—7·85*	13·45	10·32	12·66	4·70	20·20	4·05	2·21	*—45·67*	2·87	2nd „	
3·54	6·54	3·29	2·27	4·81	4·42	*—2·86*	3·73	3·28	3·45	2·95	12·15	2·11	...	*—19·41*	2 07	1st half	118
3·01	3·12	2·18	3·77	3·29	3·78	*—2·81*	3·05	2·88	3 60	1·43	10·37	1·04	0·78	*—6·71*	0·62	2nd „	
39·74	46·59	47·27	42·89	33·44	37·28	84·41	34·04	39·06	54·22	32·60	57·37	23·14	...	61·56	37 98	1st half	119
48·78	66·15	45·82	37·88	40·46	41·42	76·38	33·79	49·85	55·33	37·89	64·78	27·02	57·35	52·66	43·58	2nd „	
51·17	51·66	51·30	48·03	63·50	60·43	15·53	64·21	57·82	44·18	66·10	39·91	70·67	...	32·05	45·33	1st half	120
42·42	31·81	52·07	52 90	55·18	56·17	23·60	63·90	46·41	42·72	60·18	33·11	68·19	41·38	44·71	44·13	2nd „	
2·42	1·75	1·11	1 15	3·06	2·29	0·01	1·75	0·35	1·60	1·30	2·72	6·19	...	6·09	16·69	1st half	121
2·19	2·04	1·71	0·78	4·36	2·41	0·02	2·31	3·74	1·95	1·93	2·11	4·79	1·27	2·63	12·29	2nd „	
6·67	...	0·32	7·93	...	...	...	...	2·77	...	...	...	...	...	...	...	1st half	122
6·61	...	0·40	8·44	...	...	...	...	...	...	...	...	...	...	...	...	2nd „	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	...	100·00	100·00	1st half	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	2nd „	
10·01	10·90	10·93	12·39	17·30	5·46	...	8·21	10·32	8·78	12·81	15·64	15·11	...	96·75	12·84	1st half	123
11·66	17·31	14·48	11·18	28·86	11·72	...	9·94	12·53	9·21	21·59	17·65	15·48	...	55·29	23·25	2nd „	
9·21	10·76	19·03	12·89	15·06	17·68	...	18·30	13·01	18·33	19·87	18·90	20·31	...	43·22	15·78	1st half	124
10·43	13·59	24·78	9·63	17 85	20·21	...	18·85	14·06	16·62	24 36	20·41	24·99	35·06	37·50	20·38	2nd „	
2·22	2·11	4·46	2·64	2·65	2·53	...	6·20	3·83	3·45	5·26	6·23	3·35	...	10·24	3·43	1st half	125
2·98	3·20	5·85	12·26	3·69	2·77	...	5·27	3 55	3·79	6 35	7·66	2·90	3·74	7·44	3·62	2nd „	
6·46	7·21	8·44	9·20	9·18	6·89	...	7·01	7·01	6·90	7·97	10·81	10·51	...	23·10	5·99	1st half	126
8·01	4·08	9·82	8·30	11·65	6·45	...	7·70	8·41	7·24	9·40	11·43	17 39	11·50	20·01	7·15	2nd „	
4·57	7 00	5·43	4·55	10·02	4·06	...	4·41	8·18	6·11	7·54	8·40	15·87	...	14·23	6·63	1st half	127
5·17	11·35	6·49	3·99	13·24	4·09	...	4 75	8·94	6·00	9 18	8·78	16·54	14·88	11·57	9·03	2nd „	
1·45	1·38	1·25	2·13	1·54	3·93	...	1·91	1·49	1·14	1·83	2·50	0·88	...	3·01	0·62	1st half	128
2·03	2·12	1·51	1·84	1·18	2·86	...	1·92	1·90	1·69	2·49	1·63	1·12	1·10	2·83	0·76	2nd „	
2·23	...	0·75	7·28	...	...	...	...	...	...	...	...	...	...	4·47	...	1st half	129
2·83	...	0·92	6·88	...	...	...	...	...	...	...	...	...	...	2·84	...	2nd „	
36·15	39·36	50·34	58·63	55·75	40·55	97·04	46·04	43 84	44·71	55·28	62·48	66·03	...	195·02	45·29	1st half	130
43 11	57·35	63·85	54·13	76·47	48·10	114·01	49·03	49·09	44·55	73·37	67·56	78·42	66·28	137·48	64·19	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (c) to (f)	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	13 (a)
		Calendar year 1904 by half-years.	Bengal-Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	PER MILE OF LINE MAINTAINED.								TABLE A.—MAINTENANCE OF				
131 *a*	General superintendence (including office expenses) . . Rs.	1st half	119·17	123·13	188·12	326·07	205·08	135·32	177·12	190·44	131·50	127·15	152·26
		2nd „	131·27	133·03	165·27	295·15	208·68	143·13	170 61	151·18	139·17	136·22	140·17
132 *a*	Maintenance and renewal of permanent-way . . . „	1st half	661·96	284·38	590·80	1,660·12	832·92	446·97	490·24	299·94	616·16	427·45	256·99
		2nd „	1,337·68	330·92	606·84	691·24	701·77	454·92	528·70	286·69	401·53	234·27	345·73
133 *a*	Repairs of bridges, &c. . „	1st half	18·46	54·82	93·08	149·42	70·12	136·40	159·63	73·16	72·76	152·96	139·67
		2nd „	15·66	93·84	84·76	164·13	94·31	222 71	160·55	22·90	55·76	100·09	83·05
134 *a*	Conservancy of rivers . . „	1st half	0·16	...	...	...	...	...	...	...	105·03	17·52	...
		2nd „	4·08	...	...	...	...	...	...	0·45	46·23	5·78	...
135 *a*	Repairs of stations and buildings „	1st half	120·82	66·70	134·29	345·51	251·00	161·94	70·78	57·23	171·21	104·18	54·42
		2nd „	67·04	57·03	117·33	332.37	198·61	140·54	85·00	18·75	140·35	118·96	42·95
136 *a*	Other charges (net) . . „	1st half	33·60	16·86	50·86	155·95	142·32	56·58	184·72	65·75	285·20	103·30	31·95
		2nd „	11·50	51·20	71·20	115·12	135·24	93·99	174 04	65 89	126·93	127·62	43·54
137 *a*	Total maintenance, &c. . „	1st half	936·17	545·89	1,057·15	2,637·07	1,501·44	937·21	1,082·49	626·51	1,381·95	932·56	635·29
		2nd „	1,567·23	666·02	1,045·40	1,598·01	1,338·61	1,055·29	1,118·90	545·36	900·02	713·94	655·44
	PER MILE OF TRACK, INCLUDING SIDINGS.												
131 *b*	General superintendence (including office expenses) . . Rs.	1st half	98·78	107·70	127·05	171·78	132·16	100·62	146·96	116·15	103·75	111·27	135·99
		2nd „	108·81	115·80	111·58	154·27	133·43	106·18	141·52	134·47	101·75	119·12	124·95
132 *b*	Maintenance and renewal of permanent-way . . . „	1st half	548·67	248·73	399·00	874·59	536·73	332·35	406·75	267·09	485·82	374·08	229·54
		2nd „	1,108·76	288·05	409·72	361·32	448·73	337·48	438 55	255·01	316·29	196·11	306·21
133 *b*	Repairs of bridges, &c. . „	1st half	15·30	47·95	62·86	78·72	45·18	101·43	132·44	65·15	57·37	133·86	124·75
		2nd „	12·98	81·68	57·23	85·79	60·30	165·21	133 17	20·37	43 92	87·52	74·04
134 *b*	Conservancy of rivers . . „	1st half	0·13	...	...	...	...	...	...	...	82·82	15 34	...
		2nd „	3·33	...	...	...	...	...	...	0·40	36·42	5·05	...
135 *b*	Repairs of stations and buildings „	1st half	85·23	58·34	90·69	182·02	161·74	120·41	58 73	50·94	134·99	91·17	48·62
		2nd „	55·57	49·64	79·21	173·73	126·99	104·26	70·51	16·68	110·56	104·02	38·31
136 *b*	Other charges (net) . . „	1st half	27·85	14·74	34·35	82·17	91·71	42·07	153·26	58·55	224·87	90·40	28·53
		2nd „	9·53	44·56	48 08	60·18	86·40	69·73	144·36	58·16	100·03	111·59	38·81
137 *b*	Total maintenance, &c. . „	1st half	775·96	477·46	713·95	1,389·28	967·52	696·88	898·14	557·83	1,089·62	816·12	567·42
		2nd „	1,299·03	579·73	705·82	835·29	855·94	782·66	928·11	485·09	708·97	623·41	584·32
	PER TOTAL TRAIN-MILE.												
131 *c*	General superintendence (including office expenses) . . As.	1st half	1·25	1·33	1·56	1·48	0·86	0·75	1·61	1·50	0·93	1·00	3·41
		2nd „	1·11	1·52	1·45	1·12	0 92	0·83	1·55	1·77	0·91	1·16	2·69
132 *c*	Maintenance and renewal of permanent-way . . . „	1st half	6·92	3·03	4·89	7·56	3·47	2·47	4·46	3·45	4·37	3·37	5·76
		2nd „	11·30	3·78	5·35	2·63	3·09	2·65	4·80	3·36	2·82	1·91	6·66
133 *c*	Repairs of bridges, &c. . „	1st half	0·19	0·59	0·77	0·68	0·30	0·75	1·45	0·84	0·52	1·21	3·14
		2nd „	0·13	1·07	0·75	0·62	0·42	1·29	1·46	0·27	0·39	0·36	1·59
134 *c*	Conservancy of rivers . . „	1st half	...	...	...	...	...	...	...	...	0·74	0·14	...
		2nd „	0·03	...	...	...	...	...		0·01	0·32	0 05	...
135 *c*	Repairs of stations and buildings „	1st half	1·08	0·72	1·11	1·58	1·04	0·89	0·64	0·66	1·21	0·82	1·22
		2nd „	0 57	0·65	1·03	1·26	0 87	0·82	0·77	0·22	0·99	1·01	0·82
136 *c*	Other charges (net) . . „	1st half	0·35	0·19	0·42	0·71	0·60	0·31	1·68	0·75	2·02	0·81	0·72
		2nd „	0·10	0·58	0·63	0·44	0·59	0 55	1·58	0·77	0·89	1·08	0·88
137 *c*	Total maintenance, &c. . „	1st half	9·79	5·91	8·75	12·01	6·27	5·17	9·84	7·20	9·79	7·35	14·25
		2nd „	13·24	7·60	9·21	6·07	5·89	6·14	10·16	6·40	6·32	6·07	12·64
	PER 1,000 GROSS TON-MILES.												
131 *d*	General superintendence (including office expenses) . . Rs.	1st half	0·34	0·24	0·24	0·28	0·11	0·13	0·32	0·24	0·17	0·20	1·19
		2nd „	0·22	0 29	0·24	0·19	0·12	0·16	0·30	0·29	0·15	0·24	0·86
132 *d*	Maintenance and renewal of permanent-way . . . „	1st half	1·87	0·55	0·76	1·45	0·47	0·45	0·89	0·55	0·79	0·68	2·01
		2nd „	2·29	0·72	0·89	0·44	0·39	0·50	0·94	0·56	0·46	0·39	2·12
133 *d*	Repairs of bridges, &c. . „	1st half	0·05	0·10	0·12	0·13	0·04	0·14	0·29	0·13	0·09	0·24	1·10
		2nd „	0·03	0·21	0·13	0·10	0·05	0·25	0·29	0·04	0·07	0·17	0 49
134 *d*	Conservancy of rivers . . „	1st half	...	...	...	...	...	...	...	...	0·13	0·03	...
		2nd „	0·01	...	...	...	...	...	...	...	0·05	0·01	...
135 *d*	Repairs of stations and buildings „	1st half	0·29	0·13	0·17	0·31	0·14	0·16	0·13	0·11	0·22	0·17	0·43
		2nd „	0·11	0·13	0 17	0·21	0·11	0·16	0·16	0·04	0·16	0·20	0·26
136 *d*	Other charges (net) . . „	1st half	0·10	0·03	0·07	0·13	0·07	0·06	0·33	0·12	0·36	0·16	0·26
		2nd „	0·02	0·11	0·10	0·08	0·08	0·10	0·31	0·13	0·15	0·23	0·30
137 *d*	Total maintenance, &c. . „	1st half	2·65	1·05	1·36	2·30	0·88	0·94	1·96	1·15	1·76	1·48	4·99
		2nd „	2·68	1·46	1·53	1·02	0·75	1·17	2·00	1·06	1·04	1·24	4·03

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

3' 3½"												2' 6"				Gauge.	
13 (*a*) & (*b*)	15 (*a*) to (*d*)	16 (*a*)	4 (*b*) & (*c*)	9 (*c*)	19 (*a*) to (*c*)	12 (*b*)	3 (*g*) to (*l*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23 (*a*)	2 (*b*)	29 (*a*)	10 (*f*) & (*g*)	2(*d*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
WAY, WORKS AND STATIONS.																	
101·00	63·92	117·72	113·36	113·20	18·41		87·30	63·54	125·89	82·41	38·27	66·82	...	150·67	7·47	1st half	131*a*
95·45	60·81	115·47	121·91	117·95	16·43		97·39	70·84	148·97	78·27	37·71	58·58	...	155·02	7·47	2nd ,,	
217·33	220·69	332·16	361·02	265·05	76·73		274·15	209·29	216·25	272·52	116·22	66·82	...	182·03	90·26	1st half	132*a*
215·28	236·72	415·06	342·97	439·10	161·99		357·58	195·40	198·22	410·21	125·32	49·72	...	178·91	117·71	2nd ,,	
128·29	4·20	76·35	48·97	54·67	—5·04		43·20	35·72	43·91	39·77	0·46	...	...	218·34	12·25	1st half	133*a*
89·55	19·65	59·76	57·66	61·15	10·06		49·94	60·88	53·57	56·95	0·49	...	...	257·24	12·25	2nd ,,	
2·12	...	1·15	0·47	...	...		...	4·81	...	...	...	...	...	170·98	...	1st half	134*a*
3·11	...	0·39	0·14	...	...		...	12·20	...	...	...	...	...	26·27	...	2nd ,,	
55·66	17·22	79·36	105·26	45·90	8·73		62·32	36·73	35·60	32·27	25·91	...	...	165·21	4·14	1st half	135*a*
54·32	18·68	73·62	101·32	41·81	8·09		69·13	40·55	35·55	43·45	16·37	...	...	59·65	8·93	2nd ,,	
33·26	12·12	64·27	109·57	64·40	7·20		23·60	36·04	16·96	33·97	6·75	...	...	115·92	22·90	1st half	136*a*
53·04	19·81	79·07	76·13	65·76	10·96		41·95	38·63	23·56	52·46	5·12	0·48	...	33·92	33·62	2nd ,,	
537·66	318·15	671·01	738·65	543·22	106·63		490·57	386·13	438·61	460·94	187·61	133·64	...	1,003·10	137·02	1st half	137*a*
510·75	355·62	743·37	700·20	725·77	207·44		615·99	418·50	464·87	641·34	185·01	106·78	...	711·01	179·38	2nd ,,	
87·54	58·19	101·84	92·18	101·87	17·56		74·50	56·38	111·88	74·13	35·29	60·07	...	139·50	7·02	1st half	131*b*
82·59	55·36	99·71	103·49	106·09	15·68		81·88	62·85	132·57	70·38	35·37	53·99	...	141·43	7·02	2nd ,,	
188·35	200·90	287·35	293·55	238·53	73·21		233·98	185·70	192·19	245·14	109·00	60·06	...	167·22	84·85	1st half	132*b*
186·28	215·49	358·39	391·15	394·94	154·54		300·63	173·36	176·40	363·86	117·57	45·82	...	163·22	110·67	2nd ,,	
111·18	3·82	66·05	39·81	49·20	—4·80		36·87	31·70	39·02	35·78	0·43	...	...	200·70	11·52	1st half	133*b*
77·48	17·80	51·60	48·94	55·01	9·61		41·98	54·03	47·68	51·21	0·45	...	...	234·68	11·52	2nd ,,	
1·84	...	1·00	0·38	...	...		...	4·27	...	...	...	...	...	157·12	...	1st half	134*b*
2·69	...	0·93	0·12	...	...		...	10·82	...	...	...	...	...	23·96	...	2nd ,,	
48·24	15·67	68·66	85·58	41·30	8·32		53·19	32·59	31·64	29·03	24·30	...	...	151·87	3·90	1st half	135*b*
47·00	16·96	63·57	86·07	37·61	7·62		58·12	35·98	31·64	39·07	15·36	...	...	54·41	8·39	2nd ,,	
28·82	11·04	55·61	89·09	57·96	6·67		20·13	31·98	15·07	30·56	6·32	...	...	106·55	21·53	1st half	136*b*
45·90	18·68	68·27	64·63	59·14	10·46		35·28	34·26	25·42	47·17	4·78	0·44	...	50·95	31·61	2nd ,,	
465·97	289·62	580·51	600·59	488·86	101·16		418·67	342·62	389·80	414·64	175·94	120·13	...	922·06	128·82	1st half	137*b*
441·94	323·78	641·87	594·40	658·79	197·91		517·89	371·30	413·71	576·69	173·53	100·25	...	643·65	169·21	2nd ,,	
1·01	1·53	1·09	1·06	1·69	0·45		0·86	0·80	1·29	1·04	1·56	2·63	...	2·16	0·23	1st half	131*c*
0·99	1·76	1·12	1·18	1·99	0·42		0·90	0·95	1·45	1·06	1·58	2·36	...	2·18	0·22	2nd ,,	
2·18	5·28	3·09	3·38	3·97	1·91		2·67	2·65	2·23	3·43	4·75	2·63	...	2·60	2·77	1st half	132*c*
2·24	6·85	4·04	3·34	7·40	4·08		3·28	2·60	1·92	5·54	5·28	2·00	...	2·51	3·48	2nd ,,	
1·29	0·10	0·71	0·46	0·82	—0·13		0·42	0·45	0·45	0·50	0·01	...	...	3·12	0·38	1st half	133*c*
0·93	0·57	0·58	0·56	1·03	0·25		0·45	0·81	0·52	0·77	0·02	...	...	3·62	0·36	2nd ,,	
0·02	...	0·01	...	...	...		...	0·06	...	...	...	...	...	2·44	...	1st half	134*c*
0·03	...	...	...	...	...		...	0·16	...	...	...	...	...	0·37	...	2nd ,,	
0·56	0·41	0·74	0·99	0·69	0·22		0·61	0·46	0·37	0·41	1·05	...	...	2·36	0·13	1st half	135*c*
0·57	0·54	0·72	0·99	0·70	0·20		0·63	0·54	0·34	0·58	0·69	...	...	0·84	0·27	2nd ,,	
0·33	0·29	0·60	1·02	0·97	0·18		0·22	0·46	0·17	0·43	0·27	...	...	1·66	0·70	1st half	136*c*
0·55	0·57	0·77	0·74	1·11	0·27		0·39	0·52	0·28	0·71	0·21	0·01	...	0·47	0·99	2nd ,,	
5·39	7·61	6·24	6·91	8·14	2·64		4·78	4·88	4·31	5·81	7·64	5·26	...	14·34	4·21	1st half	137*c*
5·81	10·29	7·23	6·81	12·23	5·22		5·65	5·58	4·51	8·66	7·78	4·37	...	9·99	5·32	2nd ,,	
0·26	0·51	0·33	0·35	0·54	0·15		0·24	0·28	0·45	0·34	0·56	0·99	...	2·09	0·17	1st half	131*d*
0·30	0·65	0·34	0·36	0·62	0·13		0·24	0·35	0·51	0·36	0·62	0·91	...	2·17	0·21	2nd ,,	
0·56	1·74	0·92	1·13	1·25	0·59		0·76	0·92	0·77	1·12	1·76	0·99	...	2·52	0·13	1st half	132*d*
0·67	2·53	1·22	1·00	2·33	1·30		0·90	0·96	0·68	1·90	2·08	0·77	...	2·50	3·36	2nd ,,	
0·33	0·03	0·21	0·15	0·26	—0·04		0·12	0·16	0·15	0·16	...	...	...	3·02	0·29	1st half	133*d*
0·28	0·21	0·18	0·17	0·33	0·09		0·13	0·29	0·18	0·27	0·01	...	...	3·60	0·25	2nd ,,	
0·01	...	...	...	...	...		...	0·02	...	...	...	...	...	2·37	...	1st half	134*d*
0·01	...	...	...	...	...		...	0·06	...	...	...	...	...	0·37	...	2nd ,,	
0·14	0·13	0·22	0·32	0·21	0·06		0·18	0·16	0·12	0·13	0·38	...	...	2·29	0·10	1st half	135*d*
0·17	0·20	0·22	0·30	0·22	0·06		0·17	0·19	0·12	0·20	0·26	...	...	0·83	0·26	2nd ,,	
0·08	0·10	0·18	0·34	0·30	0·05		0·06	0·16	0·06	0·14	0·08	...	...	1·61	0·54	1st half	136*d*
0·16	0·21	0·23	0·22	0·34	0·09		0·11	0·19	0·10	0·25	0·08	0·01	...	0·47	0·96	2nd ,,	
1·38	2·51	1·86	2·29	2·56	0·81		1·36	1·70	1·55	1·89	2·78	1·98	...	13·20	3·23	1st half	137
1·59	3·80	2·19	2·05	3·84	1·67		1·55	2·04	1·59	2·98	3·65	1·69	...	9·94	5·14	2nd ,,	

Included with the Assam-Bengal.

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number.	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*f*)	7 (*a*) to (*c*)	9 (*a*) & (*b*)	10 (*a*) to (*e*)	11 (*a*) & (*b*)	12 (*a*)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
													TABLE B.—LOCOMOTIVE
	Average price of fuel per ton in terms of . . coal . Rs.	1st half	6·32	3·09	17·31	6·00	1·97	10·13	12·29	4·68	13·88	7·33	7·69
		2nd „	6·54	3·41	15·93	5·88	1·97	10·67	11·42	4·69	13·38	7·44	7·58
	wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.												
138*a*	General superintendence (including office expenses) . . . *Annas*	1st half	0·63	0·82	1·21	0·83	0·66	0·59	0·75	0·78	0·53	0·49	1·17
		2nd „	0·53	0·95	1·12	0·66	0·73	0·63	0·65	0·81	0·55	0·54	1·03
139*a*	Running expenses . „	1st half	1·22	2·31	3·36	2·29	2·11	2·74	1·84	1·83	1·49	1·07	1·79
		2nd „	1·13	2·28	3·07	1·98	2·12	2·77	1·97	1·81	1·50	1·15	1·60
140*a*	Fuel . . . . „	1st half	2·10	1·38	7·20	2·56	0·94	4·10	4·91	2·06	5·06	2·95	2·53
		2nd „	2·05	1·45	6·20	2·65	0·98	4·17	4·84	2·02	5·16	2·89	2·27
141*a*	Water . . . „	1st half	0·17	0·19	0·49	0·18	0·11	0·31	0·29	0·26	0·19	0·12	0·23
		2nd „	0·16	0·17	0·45	0·19	0·03	0·27	0·28	0·28	0·20	0·12	0·22
142*a*	Oil, tallow and other stores . . . . „	1st half	0·35	0·25	0·49	0·33	0·34	0·36	0·35	0·33	0·26	0·22	0·27
		2nd „	0·29	0·25	0·40	0·36	0·30	0·37	0·34	0·34	0·26	0·25	0·21
143*a*	Maintenance and renewal of locomotives . . „	1st half	2·61	2·11	5·14	13·36	2·48	3·67	3·26	2·15	2·83	1·62	1·81
		2nd „	1·83	2·28	4·81	1·91	2·41	3·66	4·74	2·43	2·60	2·38	2·04
143A	Maintenance and renewal of machinery, tools and plant . . . . „	1st half	0·07	0·09	0·71	0·68	0·13	0·20	0·11	0·18	0·24	0·17	0·01
		2nd „	0·06	0·07	0·53	0·36	0·14	0·39	0·13	0·15	0·26	0·20	0·02
144*a*	Other charges (net) . . „	1st half	0·33	1·46	0·91	0·42	0·93	1·41	1·12	0·84	1·30	1·53	1·07
		2nd „	0·26	1·68	0·80	0·33	1·06	1·17	1·48	0·76	1·82	1·31	0·88
145*a*	Total locomotive expenses . . . . „	1st half	7·48	8·61	19·51	20·70	7·70	13·38	12·63	8·43	11·90	8·17	8·88
		2nd „	6·31	9·13	17·48	8·44	7·77	13·43	14·43	8·60	12·35	8·84	8·27
	Fuel consumed in terms of . . coal (Kurhurbaree) . lbs.	1st half	37·29	62·47	58·23	59·67	66·64	56·74	55·47	61·57	51·01	50·75	43·56
		2nd „	43·98	59·30	55·34	63·21	66·28	54·64	59·35	60·19	53·92	48·90	39·31
	wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	PER ENGINE-MILE.												
138*b*	General superintendence (including office expenses) . . . . *Annas*	1st half	0·51	0·70	1·00	0·56	0·51	0·51	0·62	0·65	0·46	0·43	0·98
		2nd „	0·41	0·82	0·94	0·43	0·56	0·56	0·54	0·68	0·48	0·46	0·82
139*b*	Running expenses . . „	1st half	0·97	1·98	2·77	1·55	1·65	2·39	1·53	1·51	1·32	0·92	1·51
		2nd „	0·88	1·98	2·52	1·32	1·63	2·44	1·63	1·52	1·31	0·98	1·29
140*b*	Fuel . . . . „	1st half	1·68	1·18	5·92	1·74	0·73	3·59	4·07	1·70	4·46	2·55	2·13
		2nd „	1·60	1·26	5·29	1·79	0·72	3·68	4·01	1·69	4·49	2·48	1·82
141*b*	Water . . . . „	1st half	0·14	0·16	0·40	0·12	0·09	0·27	0·24	0·21	0·17	0·10	0·20
		2nd „	0·13	0·15	0·38	0·13	0·07	0·24	0·23	0·23	0·17	0·10	0·18
142*b*	Oil, tallow and other stores . . . . „	1st half	0·28	0·21	0·40	0·27	0·26	0·32	0·29	0·28	0·22	0·19	0·23
		2nd „	0·23	0·22	0·33	0·24	0·23	0·33	0·29	0·28	0·23	0·21	0·17
143*b*	Maintenance and renewal of locomotives . . „	1st half	2·08	1·80	4·22	9·09	1·95	3·20	2·71	1·78	2·50	1·40	1·52
		2nd „	1·43	1·98	4·04	1·28	1·86	3·23	3·93	2·04	2·26	2·05	1·64
143A (*b*)	Maintenance and renewal of machinery, tools and plant . . . . „	1st half	0·05	0·08	0·58	0·46	0·11	0·18	0·09	0·16	0·21	0·15	...
		2nd „	0·04	0·06	0·45	0·24	0·10	0·34	0·10	0·13	0·23	0·17	0·01
144*b*	Other charges (net) . . „	1st half	0·26	1·26	0·75	0·28	0·73	1·23	0·93	0·69	1·15	1·32	0·90
		2nd „	0·20	1·47	0·67	0·22	0·81	1·03	1·23	0·64	1·60	1·13	0·76
145*b*	Total locomotive expenses . . . . „	1st half	5·97	7·37	16·04	14·07	6·03	11·69	10·48	6·98	10·49	7·06	7·47
		2nd „	4·92	7·94	14·68	5·65	5·98	11·85	11·96	7·21	10·77	7·58	6·63
	Fuel consumed in terms of . . coal (Kurhurbaree) . lbs.	1st half	29·77	53·51	47·87	40·60	52·22	49·56	46·37	50·96	44·97	43·82	36·69
		2nd „	31·27	51·60	46·46	42·35	51·07	48·23	49·17	50·46	47·03	41·96	31·48
	wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

3′ 3½″													2′ 6″				Gauge.	
13 (*a*) & (*b*)	15 (*a*) to (*d*)	16 (*a*)	4 (*b*) and (*c*).	9 (*c*)	19 (*a*) to (*c*)	12 (*b*)	3 (*g*) to (*i*).	20(*a*) & (*b*).	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23 (*a*)	2 (*b*)	29 (*a*)	0 (*f*) & (*g*)	2 (*d*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Baipur-Dhamtari.	Calendar year 1904 by half-years.	
EXPENSES.																	
6·05	16·00	11·97	7·75	6·98	...		16·16	...	11·93	10·86	21·43	3·08	...	16·32	3·00	1st half	
6·02	16·21	11·22	6·89	4·81	...		16·01	...	10 26	11·07	20·02	3·44	21·00	15·27	3·35	2nd „	
...	...	...	...	...	...		...	4·10	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	4 52	...	...	...	...	...	...	...	2nd „	
0·35	0·90	0·94	0·55	1·08	0·42		0·66	0·66	0·60	0·78	1·74	1·05	...	0·57	0·60	1st half	138a
0·41	1·00	1·02	0·57	1·19	0·43		0·69	0·91	0·57	0·84	1·74	0·64	0·45	0 59	0·62	2nd „	
0·81	1·24	2·74	1·05	1·53	0·77		1·34	0·73	1·45	1·70	0·78	1·25	...	1·04	0·88	1st half	139a
0·81	1·33	2·59	1·07	1·50	0·75		1·88	0·76	1·48	1·78	0·91	1·16	2·77	1·08	1·05	2nd „	
1·87	3·23	4·06	2·04	2·01	4·59		3·93	2·19	3·09	2·73	4·70	1·33	...	2·30	0·61	1st half	140a
1·63	3·18	3·57	1·86	1·41	4·60		3·86	2·21	3·17	2·67	4·33	1·11	12·26	2·12	0·60	2nd „	
0·15	0·15	0·30	0·17	0·26	0·30		0·27	0·13	0·13	0·21	0·41	0·16	...	0·70	0·43	1st half	141a
0·14	0·18	0·28	0·08	0·27	0·31		0 28	0·17	0·13	0 22	0·35	0·33	1·42	0·63	0·36	2nd „	
0·17	0·27	0·34	0·24	0·25	0·32		0·23	0·19	0·21	0·16	0·27	0·13	...	0·44	0·13	1st half	142a
0·17	0·33	0·40	0·22	0·27	0·27		0 24	0·19	0 22	0·16	0·24	0·25	2·32	0·47	0·17	2nd „	
0·86	1·45	1·77	1·21	1·14	1·17		2·80	1·59	3·38	2·30	1·19	0·49	...	1·01	0·88	1st half	143a
0·95	1·86	3 65	1·21	1·13	1·35		2·94	1·25	2·10	2·29	0·68	0·66	1·81	1·32	0·61	2nd „	
0·04	0·09	0·16	0·27	0·19	0·12		0·38	0·14	0·17	0·24	0·15	...	...	0·10	...	1st half	143 A (*a*)
0·03	0·17	0·18	0·22	0·22	0·12		0·38	0·24	0·10	0·24	0·75	0·02	...	0·27	0·04	2nd „	
0·76	0·17	0·55	1·66	0·63	0·86		0·50	0·52	0·37	0·90	...	2·66	...	0·24	1·69	1st half	144a
0·63	...	0·68	0·67	1·57	1·18		0·50	0·53	0·38	1·37	...	2·89	0·99	0·30	1·22	2nd „	
5.01	7·50	10·86	7·19	7·09	8·55	Included with the Assam-Bengal.	10·66	6·15	9·40	9·02	9·24	7·07	...	6·40	5·17	1st half	145a
4·77	8·05	12·37	5·90	7·56	9·01		10·72	6·26	8·15	9·77	9·00	7·06	22 02	6·78	4·67	2nd „	
43·20	28·24	47·52	36·88	40·30	43·87		34·09	...	36·25	35·21	27·65	60·17	...	19·63	28·10	1st half	
37·87	27·50	44 64	37·64	41·07	42·13		33·77	...	43·23	36·33	26 89	45·19	79·75	19·40	24·88	2nd „	
...	...	...	...	...	...		...	82·11	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	78·91	...	...	...	...	...	...	...	2nd „	
0·29	0·83	0·77	0·44	0·98	0·41		0·56	0·53	0·54	0·69	1·63	0·88	...	0·48	0·58	1st half	138b
0·34	0·90	0·85	0·45	1·07	0·41		0·69	0·76	0·52	0 74	1·64	0·55	0 38	0·49	0·61	2nd „	
0·67	1·14	2·24	0·84	1·38	0·71		1·56	0·59	1·32	1·50	0·73	1·06	...	0·88	0·87	1st half	139b
0·67	1·19	2·17	0·86	1·36	0·71		1·63	0 62	1·36	1·56	0·86	0·98	2·33	0·89	1·05	2nd „	
1·54	2·97	3·33	1·64	1·82	4·27		3·34	1·77	2·80	2·41	4·41	1·13	...	1·95	0·59	1st half	140b
1·35	2·86	3·00	1·43	1·27	4·29		3·54	1·83	2·90	2·52	4·08	0·94	10·82	1·74	0·59	2nd „	
0·13	0·13	0·25	0·14	0·24	0·28		0·23	0 11	0·12	0·19	0·38	0·13	...	0·60	0·42	1st half	141b
0·11	0·16	0·23	0·07	0 24	0·29		0·24	0·14	0·11	0·19	0·33	0·28	1 91	0·52	0·36	2nd „	
0·14	0·25	0·28	0·19	0·22	0·30		0·24	0·15	0·19	0·14	0·25	0·10	...	0·37	0·13	1st half	142b
0·14	0·30	0·34	0 18	0·24	0·25		0·21	0·16	0·20	0·15	0·22	0 21	1·96	0·39	0 17	2nd „	
0·71	1·33	1·45	0·97	1·04	1·10		2·37	1·27	3·07	2·03	1·12	0·43	...	0·85	0·82	1st half	143b
0·79	1·67	3 07	0·97	1·02	1·25		2·54	1·02	1·92	2·01	0·64	0·56	1·52	1·09	0·61	2nd „	
0·03	0·08	0·12	0·21	0·16	0·10		0·33	0·11	0·16	0·21	0·14	...	...	0·09	...	1st half	143 A (*b*)
0·03	0·15	0·15	0·18	0·19	0·11		0·28	0·20	0·09	0·21	0·71	0 01	...	0 22	0·04	2nd „	
0·63	0·16	0·45	1·38	0·58	0·80		0·43	0·42	0·33	0·79	...	2·26	...	0·20	1·66	1st half	144b
0·55	...	0·57	0·54	1 40	1·10		0·43	0 44	0·35	1·21	...	2·45	0·83	0·25	1·21	2nd „	
4·14	6·89	8·89	5·76	6·42	7·97		9·06	4·95	8·53	7·96	8·66	5·99	...	5·42	5·07	1st half	145
3·96	7·23	10·38	4·73	6·79	8·41		9·26	5 17	7·45	8·89	8·48	5·98	18·53	5·59	4·64	2nd „	
35·66	25·96	38·92	29·55	36·51	40·92		28·97	...	32·87	31·09	25·95	51·06	...	16·78	27·61	1st half	
31·41	24·69	37·46	30·22	36 85	39·35		29·16	...	39·51	31 92	25·57	38 33	67·11	16·00	24·76	2nd „	
...	...	...	...	...	...		...	66·16	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	65 18	...	...	...	...	...	...	...	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number.	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (f)	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western	Oudh and Rohilkhand.	Assam-Bengal.
	PER 1,000 GROSS TON-MILES.													TABLE B.—LOCOMOTIVE
138c	General superintendence (including office expenses) . . Rs.	1st half	0·17	0·15	0·19	0·16	0·09	0·11	0·15	0·12	0·11	0·10	0·41
		2nd „	0·11	0·18	0·19	0·11	0·09	0·12	0·13	0·13	0·09	0·11	0·34
139c	Running expenses . . „	1st half	0·33	0·41	0·52	0·43	0·28	0·50	0·37	0·29	0·32	0·22	0·63
		2nd „	0·23	0·44	0·51	0·33	0·27	0·53	0·39	0·30	0·25	0·28	0·51
140c	Fuel . . . . . „	1st half	0·57	0·25	1·12	0·49	0·12	0·75	0·98	0·33	1·10	0·60	0·89
		2nd „	0·42	0·28	1·05	0·45	0·12	0·79	0·95	0·33	0·85	0·59	0 73
141c	Water . . . . „	1st half	0·05	0·03	0·08	0·04	0·02	0·05	0·06	0·04	0·04	0·02	0·08
		2nd „	0·03	0·03	0 07	0·03	0·01	0 05	0·06	0·05	0·03	0 02	0·07
142c	Oil, tallow and other stores. „	1st half	0·09	0·04	0·08	0.07	0·04	0·07	0·07	0·06	0·06	0·04	0·09
		2nd „	0·06	0·05	0·07	0·06	0·04	0 07	0·07	0·06	0·04	0·05	0·07
143c	Maintenance and renewal of locomotives . . . „	1st half	0·70	0·37	0·80	2·56	0·33	0·67	0·65	0·35	0·61	0·33	0·64
		2nd „	0·37	0·44	0·80	0·32	0·30	0·70	0·38	0·40	0·43	0·49	0·65
143c A	Maintenance and renewal of machinery, tools and plant „	1st half	0·02	0·02	0·11	0·13	0·02	0·03	0·02	0·03	0·05	0·03	...
		2nd „	0·01	0·01	0·09	0·06	0·02	0 07	0·02	0·02	0·04	0·04	...
144c	Other charges (net) . . „	1st half	0·09	0·26	0·14	0·08	0·12	0·26	0·22	0·13	0·28	0·31	0·37
		2nd „	0·05	0·32	0·18	0·05	0·13	0·23	0·29	0·13	0·30	0·27	0·27
145c	Total locomotive expenses . „	1st half	2·02	1·53	3·04	3·96	1·02	2·44	2·52	1·35	2·57	1·65	3·11
		2nd „	1·28	1·75	2·91	1·41	0·98	2·55	2·84	1·42	2·03	1·80	2·64
	Fuel consumed in terms of coal (Kurburee.) lbs.	1st half	161·30	178·00	144·95	182·63	141·36	165·56	178·39	157·58	146·64	163·52	244·03
		2nd „	142 30	183·39	147·44	169·58	133·31	166·11	187·02	159·01	141·84	159·29	200·54
	Fuel consumed in terms of wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.													TABLE C.—CARRIAGE AND
146a	General superintendence (including office expenses) . Annas	1st half	0·31	0·16	0·48	0·38	0·16	0·19	0·19	0·22	0·13	0·11	0·37
		2nd „	0·26	0·19	0·43	0·29	0·18	0·21	0·16	0·20	0·09	0·14	0·35
147a	Repairs and renewals of coaching vehicles . „	1st half	0·87	0·58	2·07	1·74	0·63	1·11	1·03	1·00	0·74	1·98	0·90
		2nd „	0·50	0·72	2·24	0·99	0 78	0·88	1·11	0·97	0·54	2 23	0·91
148a	Repairs and renewals of goods vehicles . . . „	1st half	0·87	0·75	3·19	2·39	0·70	1·20	0·98	1·36	1·84	1·31	0·89
		2nd „	0·60	0 94	2·04	1·38	0·79	1·32	1·42	1·14	1·05	0·70	1·05
148A (a)	Repairs and renewals of machinery, tools and plant „	1st half	0·01	0·02	0·22	0·03	0·19	0·10	0·08	0·05	0·03	0·05	0·01
		2nd „	0·02	0·02	0·20	0·02	0 10	0·09	0·07	0·04	0·03	0·04	0·02
149a	Cleaning and oiling . . „	1st half	0 48	0·58	0·61	0·36	0·14	0·46	0·34	0·44	0·29	0·34	0·19
		2nd „	0·43	0·73	0 50	0·34	0·18	0·44	0·34	0·42	0 30	0·35	0·20
150a	Other charges (net) . . „	1st half	...	0·01	0·05	0·05	0·01	0·02	0·15	0·02	0·04	0·02	0·01
		2nd „	...	0·02	0·03	0·02	0 01	0·01	0·23	...	0·02	0·01	0·16
151a	Total carriage and wagon expenses . . . . „	1st half	2·54	2 10	6·62	4·95	1·83	3·08	2·77	3·09	3·07	3·81	2·37
		2nd „	1·81	2·62	5·44	3·04	2·04	2·95	3·23	2·77	2·03	3·48	2·69
	PER 1,000 VEHICLE-MILES RUN BY HOME VEHICLES.													
146b	General superintendence (including office expenses) . . Rs.	1st half	1·35	0·35	1·10	1·16	0·32	0·64	0·57	0·49	0·40	0·26	1·24
		2nd „	0·72	0·42	1 10	0·75	0·40	0·78	0·50	0·46	0·24	0·31	1·08
147b	Repairs and renewals of coaching vehicles calculated on coaching vehicle mileage. „	1st half	5·87	5·52	13·39	13·37	6·02	12·46	8·69	9·79	7·06	16·18	6·12
		2nd „	4·25	6·40	13·26	8·84	6·63	8·62	9·27	9·48	5·07	17·29	7·32
148b	Repairs and renewals of goods vehicles calculated on goods vehicle mileage. „	1st half	10·40	2·11	11·46	12·13	2·26	5·86	4·60	3·97	7·96	4·19	5·37
		2nd „	2·47	2·77	9·24	5·06	2·39	5·29	6·62	3·37	3·98	2·33	5·86
148A (b)	Repairs and renewals of machinery, tools and plant . „	1st half	0·03	0·05	0·51	0·11	0·45	0·33	0·23	0·11	0·03	0·11	0·04
		2nd „	0·05	0·06	0 50	0·05	0·23	0·34	0·23	0 09	0·03	0·10	0·04
149b	Cleaning and oiling . . „	1st half	2·08	1·28	1·40	1·11	0·34	1·56	1·02	1·01	0·87	0·79	0·64
		2nd „	1·19	1·62	1·29	0·89	0 39	1·67	1·04	0·95	0·20	0·34	0·65
150b	Other charges (net) . . „	1st half	...	0·03	0·11	0·17	0·01	0·03	0·48	0·04	0·12	0·04	0·03
		2nd „	...	0·04	0·09	0·05	0·02	0·03	0·69	0·01	0·06	0·02	0·48
151b	Total carriage and wagon expenses . . . . „	1st half	10·95	4·60	15·27	15·18	4·39	10·41	8·36	6·95	9·14	8·76	7·26
		2nd „	5·01	5·81	13·96	7·92	4·53	11·24	10·18	6·30	5·96	8·12	8·37

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

3′ 3½″													2′ 6″				Gauge.	
13 (*a*) & (*b*)	15 (*a*) to (*d*)	16 (*a*)	4 (*b*) & (*c*)	9 (*c*)	19 (*a*) to (*c*)	12(*b*)	3 (*g*) to (*i*)	20(*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23 (*a*)	2 (*b*)	29(*a*)	10 (*f*) & (*g*)	2 (*d*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
EXPENSES—*concld.*																	
0·10	0·29	0·27	0·18	0·34	0·14		0·18	0·23	0·21	0·25	0·64	0·40	...	0·55	0·46	1st half	138c
0·12	0·37	0·31	0·17	0·38	0 14		0·19	0·34	0·20	0·29	0·68	0·25	0·45	0·59	0·60	2nd „	
0·22	0·41	0·82	0·35	0·48	0·23		0·52	0·26	0·50	0·55	0·29	0·47	...	1·00	0·68	1st half	139c
0·25	0·49	0·78	0·32	0·48	0·24		0·52	0·28	0·52	0·61	0·35	0·45	2·76	1·07	1·02	2nd „	
0·51	1·06	1·21	0·68	0·63	1·41		1·12	0·76	1·06	0·89	1·75	0·50	...	2·23	0·46	1st half	140c
0·49	1 18	1·09	0·56	0 44	1·47		1·06	0·81	1 12	0·99	1·70	0·43	12 23	2·10	0·58	2nd „	
0·04	0·05	0·09	0·06	0·08	0·09		0·08	0·05	0·05	0·07	0·15	0·06	...	0·68	0·33	1st half	141c
0·04	0·07	0·09	0 02	0·08	0·10		0·08	0 06	0·04	0·07	0 13	0·13	1·42	0·63	0·35	2nd „	
0·05	0·09	0·10	0·06	0·08	0·10		0·08	0·06	0·07	0·05	0·10	0·05	...	0·43	0·10	1st half	142c
0 05	0·12	0·12	0·07	0·09	0·09		0·07	0 07	0·06	0 06	0·09	0 09	2·82	0·47	0·16	2nd „	
0·24	0·48	0·53	0·40	0·36	0·36		0·80	0·55	1·16	0·75	0·43	0·19	...	0·98	0·63	1st half	143c
0·29	0·68	1·11	0·36	0·35	0·42		0·81	0·45	0 74	0·79	0·27	0·25	1·80	1·31	0·59	2nd „	
0·01	0·03	0·05	0·09	0·06	0·03		0·11	0·05	0·06	0·09	0·05	...	...	0·10	...	1st half	143
0·01	0·06	0·05	0·07	0·06	0·04		0 09	0 09	0·04	0·08	0·29	0·01	...	0 27	0 03	2nd „	A(c)
0·20	0·06	0·16	0·55	0·20	0·27		0·14	0·18	0·13	0·29	...	1·00	...	0·24	1·30	1st half	144c
0·19	...	0·20	0 20	0·49	0·38		0·13	0·19	0·14	0·47	...	1 12	0 99	0·30	1·18	2nd „	
1·37	2·47	3·23	2·39	2·23	2·63		3·03	2·14	3·24	2·93	3·41	2·67	...	6·21	3·96	1st half	145c
1·44	2 97	3·75	1·77	2·37	2 88		2·94	2·29	2 88	3·36	3·51	2 73	21·97	6·74	4·51	2nd „	
180·88	149·06	226·48	195·67	203·48	215·98		155·06	...	199·59	183·24	164·88	363·37	...	307·52	345·29	1st half	
183·33	162·67	216·59	180·85	206·13	215·81		148·13	..	244·89	199·67	169·46	279·94	1,272·64	308 63	384 81	2nd „	
...	...	...	...	...	...		...	457·76	...	...	...	...	..	...	...	1st half	
	...	...	...	...	...		...	462·32	...	...	...	...	...	...	...	2nd „	
WAGON EXPENSES.																	
0·12	0·27	0·27	0·35	0·16	0·14		0·27	0·34	0·20	0·24	0·28	0·21	...	0·10	0·15	1st half	146a
0·15	0·29	0·30	0 35	0·20	0 15		0·27	0·53	0·19	0·26	0·27	0·13	0·41	0 06	0·15	2nd „	
0·38	0·35	0·87	0·94	0·43	0·51		1·13	0·47	0·56	0·97	1·80	0·09	...	0·45	0·33	1st half	147a
0·43	0·59	0·83	1·41	0·57	0·57		1·37	0·37	0 69	1·03	2 17	0·18	1·04	0·45	0·23	2nd „	
0·39	0·39	1·04	3·62	0·31	0·35		1·74	0·71	0·73	0·64	0·60	0·13	...	0·58	0·30	1st half	148a
0 43	1·23	1·42	5·25	0·42	0 25		1·25	0·53	0·71	0·86	0·57	0·09	0·30	0·36	0 07	2nd „	
0·04	0·04	0·05	0·09	0·06	0·02		0·12	0·03	0·05	0 03	...	...	...	...	...	1st half	148
0·04	0·08	0·06	0·04	0·05	0·04		0·12	0 05	0 04	0·04	...	...	...	0·01	...	2nd „	A(a)
0·26	0·22	0·29	0·24	0·29	0·20		0·33	0·25	0·24	0·19	0·31	0·73	...	0·36	0·33	1st half	149a
0·29	0 24	0·28	0·30	0·31	0·21		0 31	0·30	0·25	0·22	0·31	0·46	0·60	0 44	0·36	2nd „	
0·02	...	0·03	0·14	...	...		0·02	0·26	*—0·02*	0·01	0·02	...	...	0·03	0·01	1st half	150a
0·02	*—0·01*	0·03	0·12	0·01	0·01		0·02	...	*—0·02*	0 14	0·02	0 01	...	0·02	0·01	2nd „	
1·21	1·47	2·55	5·33	1·25	1·22		3·61	1·81	1·76	2·38	3·01	1·16	...	1·52	1·12	1st half	151a
1 36	2·42	2·22	7·47	1·56	1·28		3·34	1·58	1 86	2·55	3·34	0·82	2·35	1 34	0·82	2nd „	
0·27	0·64	0·76	1·00	0·55	0·47		0·63	0·87	0·61	0·67	0·74	0·74	...	0·64	0·72	1st half	146b
0·36	0·77	0·82	0·92	0·65	0·47		0·62	0 90	0 61	0·74	0·95	0·45	4·62	0·34	0·98	2nd „	
2·24	1·87	5·75	6·98	3·75	1·68		7·37	3·49	3·45	8·24	8·38	0·74	...	5·88	4·45	1st half	147b
2·40	2·55	5·51	8·90	3·95	3·39		9·17	2·43	4·28	8·85	10·14	1·15	11·64	5·50	3·31	2nd „	
1·40	2·52	4·93	17·02	1·67	1·12		6·71	2·82	4·44	3·73	3·75	0·76	...	7·99	2·25	1st half	148b
1 95	8·39	6·77	23·38	2·96	1·61		4·57	2·69	4·69	3·60	7·42	0·48	3·43	3 72	0 77	2nd „	
0·09	0·10	0·13	0·24	0·20	0·08		0·29	0·09	0·17	0·10	...	0·01	...	0·01	0·01	1st half	148
0·09	0·23	0·16	0·09	0·18	0·13		0·29	0·13	0 12	0 10	0·03	0·01	...	0·08	...	2nd „	A(b)
0·87	0·52	0·80	0·69	0·97	0·63		0·80	0·65	0·74	0·53	0·85	2·52	...	2·40	1·55	1st half	149b
0 72	0·62	0·79	0·78	1·00	0·66		0·73	0·83	0·80	0·61	1·07	1·58	6·70	2·48	2·31	2nd „	
0·03	...	0·09	0·40	...	0·01		0·06	0·69	*—0·05*	0·03	0·07	...	...	0·16	0·02	1st half	150b
0 05	*—0·01*	0·08	0·32	1·01	0·03		0·05	0·01	*—0·06*	0·39	0 09	0·04	...	0·12	0·06	2nd „	
2·68	3·50	7·05	15·45	4·19	3·99		8·74	4·70	5·42	6·61	13·74	4·04	...	10·12	5·34	1st half	151b
3·37	6·43	8·09	12·90	5·05	3·83		7 88	4·43	5 94	7·17	19·70	2 83	26·39	7·57	5·27	2nd „	

Included with the Assam-Bengal.

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number.	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*f*)	7 (*a*) to (*c*)	9 (*a*) & (*b*)	10 (*a*) to (*c*)	11 (*a*) & (*b*)	12 (*a*)
		Calendar year 1904 by half-years.	Bengal-Central.	Bengal Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	PER TOTAL TRAIN-MILE.										TABLE D.—TRAFFIC		
152*a*	General superintendence (including office expenses) . . *Annas*	1st half	1·04	0·95	1·04	1·54	0·71	0·49	0·79	0·53	0·48	0·59	1·06
		2nd „	0·90	0·99	0·99	1·24	0·82	0·51	0·82	0·54	0·49	0·69	0·98
153*a*	Station staff . . . . „	1st half	3·14	2·14	3·80	6·37	2·65	1·98	2·12	1·88	1·87	2·45	2·62
		2nd „	3·77	2·18	3·44	6·13	2·78	2·03	2·15	1·91	2·05	2·63	3·07
154*a*	Train staff . . . . „	1st half	0·59	0·72	0·97	1·08	1·11	1·26	0·66	0·70	0·75	0·77	0·61
		2nd „	0·51	0·72	0·90	0·96	1·12	1·34	0·68	0·71	0·77	0·81	0·59
155*a*	Fuel, lighting, water and general stores . . . „	1st half	0·50	0·49	0·85	1·17	0·50	0·63	0·49	0·44	0·46	0·43	0·53
		2nd „	0·41	0·48	0·86	1·06	0·57	0·62	0·53	0·45	0·58	0·59	0·53
156*a*	Clothing . . . . „	1st half	0·05	0·04	0·12	0·08	0·08	0·06	0·07	0·03	0·04	0·16	0·16
		2nd „	0·01	0·04	0·16	0·09	0·09	0·06	0·06	0·07	0·10	0·09	0·06
157*a*	Printing, stationery and tickets . . . . „	1st half	0·51	0·36	0·54	0·34	0·24	0·20	0·47	0·21	0·18	0·21	0·27
		2nd „	0·34	0·29	0·45	0·43	0·24	0·23	0·47	0·25	0·22	0·23	0·21
158*a*	Charges for delivery and collection of goods, etc. . „	1st half	...	0·01	...	0·01	0·01	0·01	0·01	0·41	...	0·01	...
		2nd „	...	...	...	0·02	0·01	0·01	0·01	...	...	0·01	...
159*a*	Miscellaneous expenses . „	1st half	0·02	0·01	0·02	0·05	0·02	0·02	0·04	...	0·01	0·01	0·02
		2nd „	0·02	0·01	0·02	0·04	0·02	0·02	0·05	0·01	0·01	...	0·03
160*a*	Payments to other lines . „	1st half	0·22	0·71	0·11	0·02	0·06	0·10	0·05	0·46	0·04	0·18	...
		2nd „	0·20	0·75	0·31	0·02	0·07	0·11	0·04	0·41	0·03	0·20	...
161*a*	Other charges (net) . . „	1st half	...	0·01	0·02	0·01	0·01	0·01	0·07	...	0·03	0·01	0·01
		2nd „	...	0·01	0·01	0·01	0·01	0·03	0·06	...	0·02	0·01	...
162*a*	Total traffic expenses . „	1st half	6·07	5·44	7·47	10·67	5·39	4·75	4·77	4·26	3·86	4·81	5·28
		2nd „	6·16	5·47	7·14	10·02	5·73	4·95	4·87	4·35	4·22	5·26	5·47
	PER CENT. ON TRAFFIC EARNINGS. (*Abstracts H and I of Revenue Accounts.*)												
152*b*	General superintendence (including office expenses) . *per cent.*	1st half	2·19	1·57	0·99	2·42	0·95	0·74	1·30	0·71	0·85	1·22	2·76
		2nd „	1·48	1·82	1·09	1·45	1·07	0·91	1·36	0·75	0·76	1·50	2·49
153*b*	Station staff . . . . „	1st half	5·58	3·55	3·63	10·02	3·54	3·01	3·49	2·52	3·28	5·05	6·86
		2nd „	6·20	4·00	3·78	7·19	3·64	3·62	3·56	2·64	3·19	5·76	7·81
154*b*	Train staff . . . . „	1st half	1·25	1·20	0·93	1·70	1·48	1·92	1·10	0·95	1·32	1·60	1·61
		2nd „	0·85	1·32	0·99	1·15	1·47	2·38	1·13	0·98	1·20	1·76	1·50
155*b*	Fuel, lighting, water and general stores . . „	1st half	0·05	0·81	0·82	1·85	0·66	0·94	0·80	0·59	0·81	0·86	1·38
		2nd „	1·67	0·89	0·95	1·24	0·75	1·11	0·89	0·62	0·85	1·29	1·33
156*b*	Clothing . . . . „	1st half	0·11	0·07	0·12	0·12	0·11	0·10	0·12	0·04	0·07	0·32	0·41
		2nd „	0·01	0·07	0·17	0·11	0·11	0·11	0·10	0·09	0·16	0·19	0·16
157*b*	Printing, stationery and tickets . . . . „	1st half	1·07	0·59	0·52	0·53	0·22	0·31	0·78	0·28	0·31	0·43	0·73
		2nd „	0·56	0·52	0·50	0·50	0·32	0·42	0·78	0·34	0·35	0·51	0·54
158*b*	Charges for delivery and collection of goods, etc. „	1st half	...	0·02	...	0·02	0·01	0·02	0·02	0·01	...	0·02	...
		2nd „	...	1·01	...	0·03	0·01	0·02	0·02	...	...	0·02	...
159*b*	Miscellaneous expenses . „	1st half	0·04	0·01	0·02	0·08	0·02	0·02	0·07	0·01	0·01	0·01	0·06
		2nd „	0·03	0·02	0·03	0·04	0·03	0·03	0·08	0·01	0·01	—0·01	0·07
160*b*	Payments to other lines . „	1st half	0·44	1·18	0·10	0·03	0·08	0·15	0·08	0·61	0·07	0·37	...
		2nd „	0·33	1·38	0·34	0·02	0·09	0·20	0·07	0·57	0·05	0·45	...
161*b*	Other charges (net) . „	1st half	...	0·01	0·02	0·02	0·02	0·02	0·11	...	0·05	0·06	0·02
		2nd „	...	0·02	0·01	0·01	0·01	0·03	0·09	...	0·04	0·03	0·01
162*b*	Total traffic expenses . „	1st half	12·73	9·01	7·15	16·79	7·19	7·23	7·87	5·72	6·77	9·91	13·83
		2nd „	10·13	10·05	7·86	11·74	7·50	8·83	8·08	6·00	6·59	11·50	13·91
	General superintendence per cent. on traffic earnings (including steamboat) . . . . *Per cent.*	1st half	2·19	1·57	0·99	2·42	0·95	0·74	1·30	0·71	0·85	1·22	2·76
		2nd „	1·48	1·82	1·09	1·45	0·95	0·91	1·36	0·75	0·76	1·50	2·49

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
13 (a) & (b)	15 (a) to (d)	16 (a)	4 .b) & (c)	9(c)	19 (a)to(c)	12 (b)	3 (g) to (l)	20 (a) & (b)	21 (a) to (f)	22 (a) to (h)	23 (a)	2 (b)	29 (a)	10(f) & (g)	2 (d)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
EXPENSES.																	
0·63	0·67	0 81	0·98	0·68	0·47		0·56	0·76	0·62	0·61	1·80	0·77	...	0·46	...	1st half	152a
0·67	0·98	0 85	0·98	0·76	0·50		0 60	0·82	0·64	0·66	1·75	1·46	1·16	0·47	0·01	2nd ,,	
1·54	2·39	2·23	2·56	1·81	1·11		2·07	1·36	1·72	1·50	1·97	2·12	...	1·48	1·52	1st half	153a
1 60	2·50	2·27	2 60	2·04	1 08		2 11	1·53	1·70	1·56	1·99	1·83	2·92	1·63	1·15	2nd ,,	
0·45	0·41	0 63	0·61	0·67	0·22		0·58	0·35	0·42	0·52	0·24	0·37	...	0·62	0·38	1st half	154a
0·46	0·50	0·77	0·62	0 74	0·21		0 55	0·40	0·40	0·55	0·27	0·69	0·99	0·56	0·39	2nd ,,	
0·42	0·52	0 49	0·57	0·61	0·42		0·47	0·35	0·34	0·35	0·32	0·23	...	0·65	...	1st half	155a
0·46	0 44	0·48	0·44	0·46	0·31		0 53	0·41	0 40	0·33	0 15	0·14	0·27	0·54	...	2nd ,,	
0·04	0·09	0·08	0·04	0·03	0·03		0·07	0·03	0·06	0·11	0·06	...	...	...	...	1st half	156a
0·03	0·01	0·11	0 04	0·08	0·03		0·10	0·02	0·02	0·06	0·05	...	0 21	0·16	—0·01	2nd ,,	
0·17	0·47	0·46	0·24	0·21	0·31		0·30	0·24	0·23	0·27	0·54	0·12	...	0·18	0·03	1st half	157a
0·21	0·57	0·34	0·28	0·28	0·29		0·28	0·35	0·28	0·30	0·41	0·74	1·28	0·23	0·05	2nd ,,	
0·15	...	0 02	...	0·01	...		...	...	...	...	...	...	...	...	...	1st half	158a
0·09	...	0·02	...	...	...		...	...	...	...	...	...	0·09	...	...	2nd ,,	
0·03	0·03	0·02	0·03	...	...		0·01	0·03	0·01	0·02	0·03	0·02	...	...	0·02	1st half	159a
0·06	0·03	0·03	0·02	0·02	...		0 01	0 04	0·02	0·02	0·03	0·02	0·04	0·01	0·03	2nd ,,	
0·08	0·22	...	...	0·30	0·77		0·06	0·19	0·07	0·20	0·31	...	...	...	...	1st half	160a
0·09	0·25	...	...	0·55	0·45		0·19	0·18	0·07	0·24	0·37	...	0·24	...	...	2nd ,,	
0·09	0·02	0·03	0·10	...	...		0·01	...	0·07	0·04	...	0·02	...	0·03	0·01	1st half	161a
0·08	...	0·03	0·07	0·61	...		0 01	...	0·02	0·05	...	0·03	0·04	0·02	0 02	2nd ,,	
3·60	5·02	4·82	5·13	4·32	3·33		4·08	3·31	3·54	3·62	5·27	3·65	...	3·42	1·96	1st half	162a
3·75	5·28	4·90	5 05	4·94	2·87		4·38	3·75	3·55	3·77	5·02	4 91	7·23	3·62	1·64	2nd ,,	
1·28	1·27	1·43	1·94	1·49	0·98		1·00	1·67	1·24	1·35	3·77	2·34	...	3·30	...	1st half	152b
1·61	1 70	1·73	1 77	1 86	1·15		1·09	1·89	1 32	1·67	4·05	5·42	1·86	2 66	0 04	2nd ,,	
3·14	3·50	3·97	5·04	3·96	2·35		3·62	2·96	3·41	3·35	4·14	6 50	...	10·68	5·56	1st half	153b
3·85	4 31	4·65	4·70	5·04	2 47		3·79	3·56	3·55	3·96	4·61	6·80	4·71	9·27	5 71	2nd ,,	
0·92	0·60	1·20	1 21	1·47	0·47		0·93	0·75	0·82	1·17	0·51	1·12	...	4·44	1·38	1st half	154b
1·10	0 86	1·57	1·13	1·82	0 49		0 99	0 93	0 84	1·41	0 63	2 57	1·58	3·20	1·96	2nd ,,	
0·87	0·77	0·87	1 12	1·33	0·89		0·81	0·76	0·67	0·78	0·67	0·71	...	4·68	...	1st half	155b
1·11	0·75	0·99	0 79	1·13	0·70		0 95	0·95	0 82	0·84	0·36	0 53	0·45	3·09	...	2nd ,,	
0·08	0·13	0·15	0·03	0·06	0·07		0·12	0·07	0·12	0·24	0·13	...	...	...	...	1st half	156b
0·08	0·01	0·24	0·08	0·19	0·08		0 18	0·05	0·05	0·15	0·11	—0·01	0·34	0·89	—0·04	2nd ,,	
0·35	0·68	0·82	0·48	0·45	0·67		0·51	0·53	0·46	0·59	1·12	0·37	...	1·27	0·12	1st half	157b
0·50	0 98	0 69	0·50	0·69	0·68		0·50	0·79	0·58	0·76	0·94	2 75	2·06	1·28	0 25	2nd ,,	
0·30	...	0·04	...	...	...		...	...	...	...	...	...	...	...	...	1st half	158b
0·22	...	0·05	...	...	...		...	...	...	...	...	...	0·13	...	...	2nd ,,	
0·07	0·04	0·03	0·06	0 02	...		0·02	0·07	0·02	0·05	0 07	0·07	...	0·03	0·08	1st half	159b
0·15	0 05	0·05	0·05	0 06	...		0·03	0 09	0 04	0·06	0·08	0·08	0 07	0·03	0·15	2nd ,,	
0·17	0·32	...	...	0·67	1·62		0·10	0·42	0·14	0·45	0·65	...	...	...	...	1st half	160b
0·23	0·43	...	...	1·36	1 03		0·34	0·38	0·15	0 61	0·86	...	0 39	...	...	2nd ,,	
0·18	0·02	0·05	0·19	0·01	...		0·02	...	0·14	0·09	...	0·07	...	0·20	0·05	1st half	161b
0·18	...	0 06	0 12	0·03	...		0 01	...	0·03	0·12	...	0·12	0·06	0·13	0·09	2nd ,,	
7·36	7·38	8·56	10·12	9·46	7·05		7·13	7·23	7·02	8·07	11·06	11·18	...	24·60	7·19	1st half	162b
9·03	9·09	10 03	9·14	12·18	6 60		7 89	8·74	7·38	9 58	11 64	18·26	11 65	20·55	8·16	2nd ,,	
1·20	1·27	1·43	1·79	1·49	0·98		1·00	1·67	1·24	1·35	3·77	2·34	...	3·30	...	1st half	
1·50	1·70	1·72	1·63	1·86	1·15		1·09	1·89	1·32	1·67	4·05	5·42	1·66	2·66	0·04	2nd ,,	

Included with the Assam-Bengal.

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5'6"										
		Number	1 (a)	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (f)	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a)
		Calendar year 1904 by half years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	PER TOTAL TRAIN-MILE.												TABLE E.—GENERAL
163a	Home expenditure . . *Annas*	1st half	1·65	0·92	0·37	0·14	0·24	0·36	0·34	0·56	0·06	0·10	2·37
		2nd „	1·32	0·91	0·29	...	0·38	0·39	0·38	0·69	...	...	1·70
164a	Agent's office—salaries and expenses . . . . . „	1st half	1·22	0·34	0·27	0·33	0·11	0·14	0·38	0·27	0·13	0·19	0·78
		2nd „	1·04	0·34	0·27	0·33	0·13	0·14	0·48	0·28	0·12	0·21	0·78
165a	Audit, accounts and pay office „	1st half	1·50	0·79	1·10	0·83	0·44	0·52	0·72	1·09	0·40	0·59	1·65
		2nd „	1·28	0·86	1·01	0·80	0·48	0·55	0·70	1·10	0·40	0·62	1·28
166a	Stores Department . . „	1st half	0·20	0·21	0·42	0·13	0·14	0·15	0·10	0·22	0·10	0·14	0·73
		2nd „	0·17	0·22	0·39	0·17	0·15	0·17	0·09	0·23	0·10	0·18	0·70
167a	Medical „ . . „	1st half	0·23	0·25	0·26	0·20	0·14	0·10	0·13	0·16	0·11	0·10	0·53
		2nd „	0·20	0·25	0·24	0·19	0·15	0·10	0·13	0·18	0·10	0·11	0·49
168a	Rents and miscellaneous . „	1st half	0·78	0·27	0·35	0·26	0·19	0·11	0·11	0·27	0·15	0·20	0·24
		2nd „	0·59	0·30	0·23	0·25	0·22	0·14	0·20	0·31	0·13	0·22	0·14
169a	Police . . . . . „	1st half	0·47	0·16	0·56	0·18	0·20	0·22	0·27	0·57	0·11	0·16	0·32
		2nd „	0·38	0·18	0·49	0·17	0·23	0·22	0·31	0·59	0·12	0·17	0·25
170a	Advertising . . . . . „	1st half	0·04	0·03	0·01	0·03	0·01	0·01	0·02	0·01	0·01	0·02	0·04
		2nd „	0·02	0·04	0·02	0·05	0·01	0·01	0·02	0·01	0·01	0·02	0·03
171a	Electric telegraph „	1st half	1·04	0·94	1·36	0·98	0·64	0·64	0·82	0·62	0·58	0·58	1·50
		2nd „	0·89	1·02	1·41	0·84	0·69	0·68	0·83	0·65	0·57	0·67	1·30
172a	Other charges (net) . . „	1st half	...	...	0·01	0·01	0·01	0·01	0·14	...	...	...	0·01
		2nd „	...	0·01	...	0·01	0·01	0·01	0·21	...	...	...	0·01
173a	Total general charges . „	1st half	7·13	3·91	4·71	3·14	2·22	2·26	3·03	3·77	1·65	2·08	8·17
		2nd „	5·89	4·13	4·40	2·81	2·45	2·41	3·35	4·04	1·55	2·20	6·63
	PER CENT. ON TOTAL EARNINGS.												
163b	Home expenditure . Per cent.	1st half	3·05	1·46	0·34	0·22	0·45	0·54	0·54	0·73	0·10	0·19	5·82
		2nd „	2·14	1·58	0·32	...	0·49	0·68	0·62	0·90	...	...	4·01
164b	Agent's office—salaries and expenses . . „	1st half	2·26	0·54	0·25	0·60	0·15	0·21	0·61	0·35	0·23	0·36	1·92
		2nd „	1·69	0·60	0·29	0·44	0·17	0·25	0·77	0·36	0·19	0·43	1·85
165b	Audit, accounts and pay office . . . . . „	1st half	2·78	1·24	1·03	1·33	0·58	0·78	1·15	1·42	0·69	1·10	4·06
		2nd „	2·07	1·19	1·09	1·07	0·61	0·98	1·13	1·44	0·63	1·23	2·89
166b	Stores Department . . „	1st half	0·37	0·33	0·39	0·21	0·19	0·23	0·16	0·29	0·17	0·27	1·80
		2nd „	0·27	0·39	0·41	0·23	0·20	0·30	0·15	0·29	0·16	0·36	1·61
167b	Medical „ . . „	1st half	0·43	0·39	0·24	0·33	0·19	0·15	0·21	0·21	0·18	0·19	1·30
		2nd „	0·33	0·44	0·26	0·25	0·20	0·19	0·22	0·24	0·16	0·21	1·15
168b	Rents and miscellaneous „	1st half	1·43	0·43	0·33	0·42	0·24	0·17	0·18	0·34	0·26	0·37	0·60
		2nd „	0·95	0·52	0·31	0·34	0·28	0·24	0·31	0·41	0·19	0·44	0·34
169b	Police . . . . . „	1st half	0·88	0·26	0·52	0·29	0·27	0·33	0·43	0·74	0·19	0·30	0·77
		2nd „	0·62	0·31	0·52	0·22	0·29	0·38	0·50	0·76	0·18	0·34	0·60
170b	Advertising . . . . „	1st half	0·07	0·05	0·01	0·05	0·01	0·02	0·03	0·01	0·01	0·03	0·09
		2nd „	0·03	0·07	0·02	0·06	0·02	0·01	0·03	0·01	0·01	0·04	0·07
171b	Electric telegraph . . „	1st half	1·92	1·43	1·27	1·57	0·84	0·97	1·30	0·80	1·01	1·10	3·68
		2nd „	1·44	1·76	1·52	1·12	0·89	1·20	1·33	0·85	0·88	1·34	3·07
172b	Other charges (net) . „	1st half	...	...	0·01	0·02	0·01	0·01	0·22	...	0·01	...	0·02
		2nd „	...	0·01	...	0·01	0·01	0·01	0·35	...	...	...	0·01
173b	Total general charges . „	1st half	13·19	6·18	4·39	5·04	2·93	3·41	4·83	4·89	2·85	3·91	20·06
		2nd „	9·54	7·17	4·74	3·74	3·16	4·24	5·41	5·26	2·39	4·39	15·60
	PER CENT. ON GROSS EARNINGS.												TABLE G.—SPECIAL AND MISCEL
174	Law charges . . . Per cent.	1st half	0·23	0·03	0·03	0·01	0·08	0·01	0·18	0·02	...	0·03	0·14
		2nd „	0·07	0·02	0·02	...	0·04	...	0·06	0·02	...	...	0·12
175	Compensation . . . „	1st half	0·02	0·04	0·06	0·98	0·13	0·15	...	0·01	0·12	0·48	0·53
		2nd „	0·06	0·19	0·09	0·92	0·12	0·17	0·01	0·01	0·14	0·11	0·15
176	Rates and taxes . . . „	1st half	0·35	0·16	0·15	0·26	0·12	0·10	0·26	...	0·07	0·08	0·27
		2nd „	0·23	0·18	0·16	0·18	0·16	0·13	0·23	...	0·05	0·08	0·20
177	Payments to other lines „	1st half	5·92	1·37	0·14	0·01	1·33	1·02	0·29	0·44	0·22	2·26	0·19
		2nd „	7·78	1·57	0·15	0·68	1·02	1·38	0·48	0·41	0·20	0·92	0·63
178	Other charges (net) . „	1st half	1·00	1·29	0·55	1·10	0·20	0·91	1·16	1·68	0·78	0·78	3·72
		2nd „	0·92	1·31	0·55	0·92	0·21	1·21	1·27	1·04	0·67	1·00	3·82
179	Total special and miscellaneous expenses . . „	1st half	7·52	2·89	0·93	2·36	1·86	2·19	1·89	2·15	1·19	3·58	4·25
		2nd „	9·06	3·27	0·97	2·70	1·55	2·90	2·05	1·48	1·06	2·06	4·92

DIX 18—*continued.*

(by systems) during each half-year of 1904—contd.

do not prepare these statistics.

18 (a) & (b)	15 (a) to (d)	16 (a)	4 (b) and (c)	9 (c)	19 (a) to (c)	12 (b)	3 (g) to (i)	20 (a) & (b)	21 (a) to (f)	22 (a) to (h)	23 (a)	2 (b)	29 (a)	10 (f) & (g)	2 (d)	Gauge. Number.	Serial number.
				3′ 3¾″								2′ 6″					
Bengal and North-Western	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
CHARGES.																	
0·47	0·13	0·78		0·78	...		0·20	1·16	0·74	0·71	...	3·64	...	0·06	1·23	1st half	163a
0·50	0·15	0·74		0·99	...		0·18	1·14	0·71	0·75	...	3·34	1·88	...	1·18	2nd ,,	
0·21	0·34	0·27		0·35	0·10		0·14	0·30	0·25	0·26	1·48	...	...	0·13	...	1st half	164a
0·16	1·14	0·23		0·39	0·09		0·17	0·30	0·20	0 28	1·49	...	3·10	0·13	...	2nd ,,	
0·76	1·40	0·60		1·40	0·65		0·60	0·79	0·71	0·68	0·90	...	...	0·40	...	1st half	165a
0·67	1·71	0·59		1·58	0·52		0·62	073	0·67	0·75	0·77	...	1·29	0·40	...	2nd ,,	
0·10	0·32	0·20		0·29	0·10		0·23	0·22	0·16	0·13	0·12	...	...	0·10	...	1st half	166a
0·11	0·39	0·21		0·32	0·10		0·23	0·18	0·14	0·19	0·12	...	0·33	0·10	...	2nd ,,	
0·10	0·39	0·15		0·31	0·06		0·14	0·10	0·21	0·14	0·25	...	...	0·14	...	1st half	167a
0·10	0·47	1·16		0·36	0 10		0·15	0·11	0·21	0·15	0·23	...	0·25	0·11	...	2nd ,,	
0·13	0·25	0·13		0·30	0·12		0·19	0·31	0·21	0·20	0·36	0·03	...	0·13	0·08	1st half	168a
0·11	0·43	0·15		0·42	0·08		0·17	0·35	0·19	0·19	0 26	...	1·21	0·16	...	2nd ,,	
0·23	0·92	0·35		0·58	0·07		0·31	0·32	0·24	0·39	...	0·03	...	0·46	0·28	1st half	169a
0·20	1·11	0·44		0·65	0·09		0·30	0·39	0·20	0·41	...	0·14	0·16	0·45	0·31	2nd ,,	
0·01	...	0·02		0·01	0·04		0·01	0·02	0·01	0·01	...	0·07	...	0·01	...	1st half	170a
...	0·01	0·02		0·02	...		0·01	0·02	0 01	0 01	...	...	0·06	0·01	...	2nd ,,	
0·57	1·12	0·67		0·72	...		0·74	0·64	0·59	0·84	0·97	1·75	...	0·68	0·58	1st half	171a
0·60	1 34	0·70		0·83	0 82		0·87	0·76	0·60	0·93	0·98	1 20	1·06	0·73	0 58	2nd ,,	
...	...	...		0·03	...		0·01	...	0 02	0·01	...	...	...	...	...	1st half	172a
...	—0·03	...		0·05	...		...	...	0·01	0·01	...	...	0·01	...		2nd ,,	
2·58	4 87	3·12		4·72	1·96		2·57	3·86	3·14	3·42	4·08	5·52	...	2·11	2·17	1st half	173a
2·45	6·72	3·24		5·61	1·82		2·70	3·98	2·94	3 68	3·85	4·62	9·35	2·09	2 07	2nd ,,	
0·37	0·18	1·27		1·55	...		0·34	2·45	1·46	1·55	...	10·46	...	0·40	3·75	1st half	163b
1·09	0·25	1·48		2·32	...		0·31	2·56	1·45	1·90	...	11·82	2·99	...	5·17	2nd ,,	
0·38	0·49	0·47		0·75	0·21		0·25	0·65	0·48	0·59	3·02	...	...	0·88	...	1st half	164b
0·36	1·91	0·46		0·94	0·21		0·29	0·67	0·41	0 70	3·36	...	4·93	0·70	...	2nd ,,	
1·41	2·01	1·06		2·97	1·31		1·03	1 67	1·39	1·56	1 84	...	...	2·71	...	1st half	165b
1·47	2·89	1·18		3·74	1·17		1·09	1 64	1·36	1·87	1·75	...	2·06	2·20	...	2nd ,,	
0·19	0·46	0·36		0·61	0·21		0·39	0·47	0·31	0·39	0·24	...	...	0·66	...	1st half	166b
0·23	0·66	0·43		0·76	0·24		0·42	0·40	0·30	0·47	0·28	...	0·52	0 56	...	2nd ,,	
0·20	0·56	0·26		0·66	0·17		0·24	0·21	0·41	0·32	0·52	...	...	0 94	...	1st half	167b
0·23	0·79	0·33		0·85	0·23		0·26	0·25	0 42	0·38	0·53	...	0·40	0·59	...	2nd ,,	
0·25	0·36	0·23		0·65	0·24		0·33	0·66	0·40	0·44	0·75	0·10	...	0·88	0·24	1st half	168b
0·24	0·72	0·29		0·99	0·16		0·31	0 77	0·39	0·48	0 59	...	1·93	0·92	...	2nd ,,	
0·42	1·32	0·62		1·22	0·14		0·53	0·69	0·47	1·37	...	0·10	...	3·14	0·86	1st half	169b
0·43	1·87	0·88		1·53	0·19		0·52	0·88	0 41	1·01	...	0·49	0·26	2·48	1·36	2nd ,,	
0·01	...	0·03		0·02	0·08		0·01	0·03	0·01	0·01	...	0·19	...	0·05	...	1st half	170b
0 01	0 02	0·04		0·04	0·01		0·02	0·05	0 03	0·03	...	...	0·09	0·04	...	2nd ,,	
1·06	1·61	1·17		1·54	1·71		1·23	1·14	1·85	1·98	5·02	...	...	4·55	1·78	1st half	171b
1·30	2·27	1·39		1·95	1 88		1·53	1·72	1·22	2·33	2·23	4·24	1·69	4·04	2·50	2nd ,,	
...	...	...		0·06	...		0·01	...	0·04	0·02	...	...	...	0·02	...	1st half	172b
...	—0·04	0·01		0·12	...		...	...	0 01	0 01	...	...	0·01	0·02	...	2nd ,,	
4·79	6·99	5·47		10·03	4·06		4·41	8·18	6·11	7·54	8·35	15·87	...	14·23	6·63	1st half	173b
5·36	11·35	6 49		13·24	4·09		4·75	8·94	6·00	9·18	8·74	16·55	14·88	11·57	9·03	2nd ,,	
LANEOUS EXPENSES.																	
0·02	0·09	0 01		0·03	...		0·02	0·13	...	0·17	...	...	...	...	...	1st half	174
0·03	0·03	0·01		0·03	...		0·02	0·15	...	0 12	...	...	0·23	...	...	2nd ,,	
0·09	0·02	0·10		0·02	0·06		0·06	0·25	0·03	0·37	0·01	0·06	...	0·09	0·01	1st half	175
0·06	0·04	0·06		0·01	0·03		0·09	0·17	0 03	0 63	0·01	...	0·03	0·06	0·01	2nd ,,	
0·03	...	0·23		0·01	...		0·16	0·01	0·09	0·10	...	...	...	...	...	1st half	176
0·06	...	0·34		0·01	...		0·16	0·02	0 26	0·09	...	...	0·60	...	...	2nd ,,	
0·34	0·17	...		0·43	3·47		0·15	0·01	0·15	0 09	2·10	...	...	...	...	1st half	177
0·48	0·97	...		0·01	2·34		0·15	...	0·21	0·18	1·35	...	0·01	...	...	2nd ,,	
1·00	1·10	0·91		1·05	0·40		0·58	1·09	0·57	1 10	0·39	0·82	...	2·22	0·61	1st half	178
1·43	1·03	1·10		1·12	0·49		0·57	1·26	0·64	1·47	0·21	1·11	0·23	2·27	0·74	2nd ,,	
1·48	1·38	1·25		1·54	3·93		0·97	1·49	0·84	1·83	2·50	0·88	...	3·01	0·62	1st half	179
2·06	2·12	1·51		1·18	2·86		0 99	1·60	1·14	2·49	1·57	1·11	1·10	2 83	0·75	2nd ,,	

Included with the 5′ 6″ gauge.

Included with the Assam-Bengal.

APPEN

Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number	1 (*a*)	2 (*a*)	3 (*a*) to (*f*)	4 (*a*)	5 (*a*) to (*d*)	6 (*a*) to (*f*)	7 (*a*) to (*c*)	9 (*a*) & (*b*)	10 (*a*) to (*e*)	11 (*a*) & (*b*)	12 (*a*)
		Calendar year 1904 by half-years.	Bengal Central.	Bengal-Nagpur	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	FROM APPENDIX I.												
180	Average number of locomotives on the line. . . No	1st half	25	226	213	141	903	805	247	59	702	201	62
		2nd „	27	228	217	143	914	827	256	59	711	201	71
181	Average miles run per locomotive *per diem* . . *Miles*	1st half	52·63	71·41	50·25	56·13	65·37	60·80	65·25	...	75·16	79·01	54·73
		2nd „	61·15	65·47	44·86	66·64	61·50	54·89	64·26	...	75·67	73·44	58·71
	lbs. coal per engine-mile (coal burning engines)—												
182	Coaching . . . *lbs.*	1st half			43·37					44·57			
		2nd „			46·30					42·77			
183	Goods . . . . „	1st half	37·22	53·51	47·40	48·20	52·22	49·56	46·37	58·81	44·27	43·82	36·69
		2nd „	42·84	51·60	46·62	49·85	51·07	48·23	49·17	54·58	47·03	41·96	31·48
184	Mixed . . . . „	1st half			49·23					53·31			
		2nd „			44·51					49·82			
	lbs. wood per engine-mile (wood burning engines)—												
185	Coaching . . . *lbs.*	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
186	Goods . . . . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
187	Mixed . . . . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	Average gross weight of trains—												
188	Coaching . . . *Tons*	1st half	142·08	199·53	165·45	168·07	224·64	156·12	151·75	134·48	207·95	194·41	219·98
		2nd „	151·82	185·09	166·17	182·04	232·83	166·60	151·36	139·39	229·43	200·77	103·03
189	Goods . . . . „	1st half	218·59	336·12	545·04	423·27	524·68	358·86	364·15	364·76	350·38	315·82	91·18
		2nd „	307·22	371·82	585·32	511·22	579·27	345·02	405·13	337·14	385·29	304·22	128·74
190	Mixed . . . . „	1st half	153·01	268·09	235·89	192·18	229·99	...	296·59	318·11	248·88	225·45	159·76
		2nd „	198·53	270·85	239·21	234·58	252·16	...	286·71	316·61	280·22	225·39	174·92
	Average through speed of trains—												
191	Coaching . *Miles per hour*	1st half	20	27·43	22·72	19·07	20·30	27·26	20·74	23·80	20·53	28·82	...
		2nd „	20	27·94	22·85	19·07	20·00	27·26	20·75	23·80	20·18	28·82	...
192	Goods . . „	1st half	14	11·62	10·11	15·00	12·00	13·34	14·06	10·30	12·04	11·97	...
		2nd „	14	11·89	9·78	15·00	12·00	13·34	14·06	10·30	11·86	11·97	...
193	Mixed . . „	1st half	15	17·32	14·43	14·30	17·40	13·11	10·95	14·22	15·35	18·44	13·12
		2nd „	15	17·33	16·32	14·30	18·00	13·11	10·95	14·22	14·74	18·44	13·12
	FROM APPENDIX II.												
194	Average mileage *per diem* of coaching vehicles, including brakes . . . . *Miles*	1st half	9,753	92,675	85,231	43,638	268,213	243,591	91,340	16,744	304,009	108,229	25,682
		2nd „	9,381	93,973	86,361	44,939	236,281	268,689	90,573	16,419	314,433	103,124	24,924
195	Goods ditto ditto „	1st half	6,055	206,065	144,894	66,727	1038,372	669,558	191,392	47,978	690,249	164,318	26,287
		2nd „	19,647	170,794	109,294	103,281	1,015,011	530,516	193,361	43,905	786,041	135,468	40,641
	FROM APPENDIX V.												
	Average age of sleepers—												
196	Wood . . . . *Years*	1st half	12·57	5·55	9·03	8·50	11·25	...	4·28	...	7·19	11·26	...
		2nd „	12·19	5·98	9·26	8·50	11·29	...	4·65	...	7·49	11·64	...
197	Iron . . . . „	1st half	...	8·97	12·32	10·50	10·32	...	31·03	...	10·77	15·47	...
		2nd „	...	9·40	12·73	11·00	10·51	...	32·34	...	11·11	15·46	...
	Percentage of removals—												
198	Wood . . . *Per cent.*	1st half	4·11	1·14	3·78	3·37	4·07	3·13	2·06	...	2·46	0·13	...
		2nd „	6·88	0·37	3·40	6·38	2·71	4·16	2·38		1·05	0·38	...
199	Iron . . . . „	1st half	...	4·40	0·28	0·50	2·74	0·59	0·28	...	7·43	4·72	...
		2nd „	...	0·05	0·55	0·59	2·59	0·48	0·41	...	4·07	3·49	...

DIX 18—*concluded.*

(by systems) during each half-year of 1904—concld.

AS APPENDICES TO THE ANALYSIS.

do not prepare these statistics.

3′ 3¾″												2′ 6″				GAUGE.	
13 (a)&(b)	15 (a)to(d)	16 (a)	4 (b) and (c)	9 (c)	19 (a) to (c)	12 (b)	3(g) to (l)	20 (a) & (b)	21 (a)to(f)	22 (a)to (h)	23(a)	2 (b)	29 (a)	10 (f) & (g)	2 (d)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1904 by half-years.	
219	31	236	129	50	48		434	35	209	226	3	10	...	26	4	1st half	180
220	28	236	126	50	48		435	33	205	223	3	9	14	25	4	2nd „	
63·04	57·22	65.55	63·39	50·64	65·01		47·02	70·30	60·00	57·41	25·58	28·92	...	36·90	41·03	1st half	181
64·96	54·50	60·48	65·89	44 99	63·52		48·60	60·83	64 71	54 01	24·71	55·85	40·00	39·60	41·56	2nd „	
																1st half	182
																2nd „	
35·66	28·82	38·92	36·58	36·45	40·92		32·51	...	32·87	32·42	25·95	51·36	...	16·78	27·61	1st half	183
31·41	27·41	37·46	36·96	36·85	39·33		32·73	...	30·51	33·28	25·37	39·20	53·00	16 00	24·76	2nd „	
																1st half	184
																2nd „	
...	...	...	...	...	...		...		...	...	...	...	...	...	...	1st half	185
...	...	...	...	...	...		...		...	...	...	...	...	...	...	2nd „	
...	...	...	...	...	...		...	66·16	...	...	...	...	...	...	...	1st half	186
...	...	...	...	...	...		...	65·18	...	...	...	...	...	...	...	2nd „	
...	...	...	...	...	...		...		...	...	...	...	...	...	...	1st half	187
...	...	...	...	...	...		...		...	...	...	...	...	...	...	2nd „	
173·87	79·65	132·37	105·56	161·08	111·42	Included with the Assam-Bengal.	107·01	...	88·86	94·25	...	...	...	14·19	...	1st half	188
157·35	87·45	130·69	125·93	198·41	137·39		109·29	...	82·33	95·45	...	...	60·00	54·72	...	2nd „	
203·70	182·21	188·00	229·05	172·48	178·93		257·33	...	145·91	288·10	...	100·76	...	18·74	32·07	1st half	189
186·23	191·33	184·40	263·98	181·58	189·72		263·23	...	147·38	274·02	...	157·95	60 00	39·90	41·91	2nd „	
186·04	158·41	179·63	185·37	156·16	124·43		125·47	...	169·63	213·05	128·34	130 77	...	41·87	69·53	1st half	190
158·64	132·69	172·91	140·44	157·20	120·29		127·87	...	161·12	209·69	119·30	138·68	60·00	83·55	50·74	2nd „	
17·00	20·65	18·84	19·28	...	...		17·60	...	18·00	16·26	...	...	...	...	...	1st half	191
17·00	20·65	18·84	19·28	...	...		17·59	...	18 00	16·26	...	...	9·00	...	...	2nd „	
9·50	10·96	10·07	11·16	11·12	10·14		10·28	9·94	9·50	7·60	...	11·75	...	8·56	...	1st half	192
9·50	11·69	10·07	11·16	11·12	10·14		10·11	9·99	9 50	7·60	...	11·75	9·00	8·48	...	2nd „	
12·20	12·03	12 95	12·51	12·54	14·23		14·27	12·87	12·00	11·67	14·76	11·05	...	9·72	12·12	1st half	193
12·20	12·03	12 95	12·51	12·54	14·23		14·29	13·72	12·00	11·67	14·76	11·55	9·00	9·75	10·37	2nd „	
130,595	19,296	119,263	54,975	16,526	27,822		166,677	16,749	114,208	78,486	1,959	1,819	...	3,914	744	1st half	194
133,294	19,469	112,993	66,023	18,163	29,620		170,978	16,947	123,448	77,206	1,840	3,096	1,161	4,234	728	2nd „	
207,691	24,721	166,586	89,070	26,192	39,685		260,086	27,085	120,762	175,832	844	2,697	...	3,696	1,372	1st half	195
166,574	12,826	157,031	99,659	20,914	34,153		311,066	18,623	121,968	150,260	643	4,859	1,360	4,628	895	2nd „	
	12·73	10·96	11·50	...			8·00	11·35	12·96	12·50	...	1·30	...	2·17	4·50	1st half	196
8·58	12·95	11·17	11·50	...	10·50		8·00	11·63	13·12	12·50	...	1·47	...	2 67	5·00	2nd „	
8·94	14·18	8·34	15·00	...	11·00		17·50	...	15·37	16·50	...	...	...	1·88	...	1st half	197
	14·58	8·84	14·50	...			18·00	...	15·85	16·50	...	...	...	2·38	...	2nd „	
	2·73	2 39	2·52	...			2·20	2·59	2·76	2·81	...	0·03	...	...	...	1st half	198
1·67	2·14	2·36	2 93	...	0·44		3·19	1·87	2·03	4·04	...	0·02	...	...	...	2nd „	
1·18	0·40	...	4·70	...	0·03		0·74	...	0·35	0·15	...	...	...	...	...	1st half	199
	0·49	...	0·90	...			0·60	...	0·23	2·70	...	...	...	...	...	2nd „	

APPEN

Rolling-stock under different heads on each

Items.	GAUGE.	5′ 6″										3′ 3½″						
	NUMBER.	1	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d).	6 (a) to (f)	7 (a) to (c)	9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a) & (b)	13 (a) & (b)	14 (a) & (b)	15 (a) to (d)	16 (a)	17	18 (a) & (b)
	Railway.	B.C.	B. N.	B. B. & C.I.	E. B. S.	E. I.	G. I. P. & I.M.	M.	N. G. S.	N. W.	O. & B.	A. B.	B. & N. W.	B. & D.	B. G. J. P.	B.	D.	D.S.
	Engines.																	
1	Passenger engines	27	57	82	59	144	821	54	5	719	58	72	20	10	37	236	4	22
2	Goods and mixed engines		174	135	88	771		202	56		144		205					
3	TOTAL ENGINES	27	231	217	147	915	821	256	61	719	202	72	225	10	37	236	4	22
	Coaching vehicles.																	
4	Saloons, Royal and State	...	...	...	...	4	...	2	15	11	...	2	3	...	...	2	...	...
5	Saloons, ordinary	4	...	13	14	...	...	...	...	...	...	...	12	4	2	8	...	...
6	Reserved carriages	...	15	9	2	39	6	13	5	62	17	...	4	...	7	39	...	...
7	Inspection carriages	1	...	...	...	...	1	3	...	...	1	8	...	1	...	...	...	...
8	Family carriages	...	...	...	...	...	8	3	2	...	2	...	...	...	5	...	...	...
9	First class carriages 4-wheeled	4	26	3	11	97	93	38	10	82	40	1	9	2	8	27	...	...
	First class carriages Bogie	...	...	1	...	2	5	...	...	...	...	...	31	...	1	...	...	...
10	Dining cars	...	2	...	...	2	3	...	...	...	3	3	3	2	...	1	...	...
11	Composite, first and second class, 4-wheeled	8	48	16	42	64	87	65	12	105	56	4	28	6	2	38	...	10
	Composite, first and second class, Bogie	...	...	20	10	35	19	...	...	24	10	12	12	...	5	11	...	
12	Composite, first, second and third class, 4-wheeled	...	...	...	...	...	2	...	...	...	4	...	...	...	...	...	...	...
	Composite, first, second and third class, Bogie	...	...	...	...	...	17	8	...	13	...	14	...	...	...	28	...	...
13	Other composite carriages	...	5	1	20	10	...	...	...	10	6	...	...	...	3	5	2	...
14	Second class Bogie	...	...	11	12	...	...	...	...	...	...	...	...	...	2	...	...	...
	Second class Ordinary	4	39	23	...	87	147	79	10	98	33	...	38	2	10	40	...	...
15	Second class with postal accommodation	...	...	...	...	...	22	...	...	...	...	...	...	...	5	...	...	...
16	Intermediate class 4-wheeled	4	26	9	24	93	...	4	...	120	39	...	24	...	10	...	...	...
	Intermediate class Ambulance	...	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...
	Intermediate class Bogie	...	...	12	...	...	...	...	...	...	...	...	...	...	2	...	...	...
17	Composite, intermediate and third class	6	15	...	33	63	...	...	...	68	31	61	54	1	...	...	...	...
18	Intermediate and postal carriages	2	3	5	4	...	...	...	...	18	...	...	...	2	...	...	...	...
19	Intermediate, third and postal carriages	1	1	...	...	...	...	...	...	...	...	2	...	3	...	...	...	...
20	Lower class	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Third class carriages 4-wheeled	34	296	152	171	730	638	493	64	79	17	...	416	24	125	240	8	35
	Third class carriages Bogie without brakes.	...	49	80	25	56	31	9	...	...	...	...	6	...	12	128	...	...
	Third class carriages Ambulance	...	23	15	...	92	19	51	...	174	...	...	...	...	...	55	...	...
22	Third class and postal vans	...	14	12	3	51	19	12	5	42	33	16	16	...	4	29	...	...
23	Third class carriages with brakes. 4-wheeled	12	62	14	...	47	150	12	...	360	99	19	76	...	...	8	...	...
	Third class carriages with brakes. Bogie	...	...	16	...	...	...	...	...	...	...	...	...	...	...	37	...	...
	Third class carriages with brakes. Ambulance	...	...	...	...	...	22	...	...	263	207	...	...	...	...	...	...	...
24	Brakevans	10	227	172	86	740	624	267	49	464	159	16	173	15	41	175	2	20
25	Brakevans with third class	...	19	...	13	...	23	20	...	101	7	51	...	...	...	35	...	...
26	Brakevans fitted with postal compartment	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	6
27	Postal vans	...	...	...	1	22	9	9	...	10	...	...	...	...	...	5	...	...
28	Composite, postal and other carriages	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...
29	Prison vans	...	...	...	...	...	8	...	...	...	...	...	...	...	...	3	...	...
30	Carriage trucks	...	4	4	6	39	55	27	2	42	...	...	5	...	6	1	...	...
31	Horse boxes	3	16	18	17	75	103	56	10	142	43	16	30	1	5	37	...	3
32	Luggage vans	3	31	26	23	41	115	30	6	61	43	12	1	...	...	31	...	4
33	Produce Vendors' vans	...	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Milk vans	6	...	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Fish vans	1	...	...	20	...	...	...	...	...	...	3	...	...	...	...	...	2
36	Store, ice and stationery vans	...	...	...	...	1	...	...	...	18	2	...	...	...	...	...	...	...
37	Miscellaneous	6	...	...	5	10	...	...	...	2	...	1	...	...	...	20	...	2
38	TOTAL COACHING VEHICLES	109	911	632	589	2,380	2,243	1,201	190	2,369	852	239	942	63	255	993	12	82
	Goods vehicles.																	
39	Covered goods wagons, Ordinary	...	...	...	255	...	...	...	...	...	...	100	200	...	...	625	...	...
	Covered goods wagons, bogies. Military	...	...	...	...	...	...	...	...	412	...	...	...	...	...	75	...	...
40	Covered goods wagons, 4-wheeled. Ordinary	431	2,475	1,404	1,458	3,210	7,140	696	45	2,113	2,131	1,105	4,989	264	153	2,644	4	233
	Covered goods wagons, 4-wheeled. Military	...	1,278	1,317	1,071	5,059	...	2,037	116	5,527	2,753	...	...	...	145	20	...	
41	High sided wagons, bogie	...	...	...	...	...	50	...	10	...	...	...	...	...	...	16	...	...
42	High-sided wagons, 4 wheeled	12	...	1,103	6	800	3,516	1,263	652	1,112	...	125	...	...	...	60	...	744
43	Medium sided wagons, bogie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
44	Medium sided wagons, 4-wheeled	...	290	443	...	...	...	...	97	...	...	...	...	...	...	310	...	...
45	Low-sided wagons, Ordinary bogie.	...	...	172	...	...	...	...	...	102	...	...	28	...	20	115	...	...
	Low-sided wagons, Military bogie.	...	...	...	...	...	...	...	...	140	...	...	...	...	...	...	...	...
46	Low-sided wagons, 4-wheeled. Ordinary	42	190	85	68	5,205	305	150	...	431	23	300	544	68	565	...	4	79
	Low-sided wagons, 4-wheeled. Military	8	156	...	267	1,669	...	229	...	1,082	374	...	...	...	...	286	...	...
47	Coal or coke wagons	...	2,504	100	...	858	...	130	...	...	110	6	...	...	...	...	...	...
48	Cattle wagons	...	...	...	2	7	...	33	...	24	...	7	...	...	6	166	...	...
49	Accident vans	2	14	14	11	26	37	16	...	...	7	...	4	...	...	13	...	...
50	Platform wagons	...	28	...	...	43	...	3	...	...	...	11	2	...	...	...	...	...
51	Powder vans	2	6	6	1	31	22	9	...	47	8	3	1	...	2	32	...	1
52	Timber trucks	8	36	20	9	...	191	264	10	49	139	54	279	12	22	93	...	50
53	Bolster trucks. Double	...	...	...	...	...	...	...	...	271	...	...	...	...	...	157	...	...
	Bolster trucks. Single	...	14	...	109	...	50	...	...	...	...	16	...	...	...	150	...	...
54	Ballast wagons	...	76	478	86	368	126	...	64	...	...	50	...	...	74	116	...	...
55	Travelling oil tanks	...	31	20	22	35	31	32	...	51	8	...	...	...	2	2	...	...
56	Travelling water tanks	...	...	21	8	...	11	10	3	72	1	...	...	...	1	13	...	...
57	Travelling gas holder	...	8	8	2	3	15	12	2	15	6	8	...	...	...	...	...	...
58	Travelling cranes	2	11	4	5	29	57	15	2	52	17	15	19	3	2	30	...	1
59	Miscellaneous	...	31	10	10	39	1	16	7	16	...	8	13	1	56	82	...	...
60	TOTAL GOODS VEHICLES	507	7,148	5,105	3,340	17,382	11,552	4,915	1,008	11,566	5,577	1,812	6,025	348	1,048	4,983	8	1,089
	LOWER CLASS CARRIAGES FITTED WITH RETIRING																	
	Intermediate class	4	35	16	15	65	...	...	...	120	45	...	...	...	12	...	...	...
	Composite, intermediate & 3rd class	3	...	...	17	25	...	...	...	...	...	...	...	...	...	...	...	...
	Third class	4	40	26	60	97	174	62	64	459	155	16	...	...	14	52	...	10
	TOTAL	11	75	42	92	187	174	62	64	579	200	16	...	...	26	52	...	10

DIX 22.

railway at close of the Calendar year 1904.

3′ 3½″									2′ 6″													2′ 0″						Items.
4 (*b*) & (*c*)	9 (*c*)	19 (*a*) to (*c*).	7 (*d*) & (*e*)	3 (*g*) to (*l*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23	25	26	4 (*d*)	4 (*b*)	3 (*m*) & (*n*)	2 (*b*) & (*d*)	29	10 (*f*) & (*g*)	31	2 (*c*)	20 (*c*)	33	34	10 (*h*)	36	6 (*g*)	37	38	39	
E. B. S. M.	H. G. V.	J. B.	N. & S. C.	R. M.	R. & K.	S. I.	S. M.	U. C.	B. L.	B. B.	C. B.	E. B. S. M.	G. D. & R.	J. G. E. & R. D	K. S.	KK T. & N. D	M. R. W.	P. L. L.	P. W. L.	B. P.	T. B.	D. L.	D. H.	G. L.	H A.	H. S.	J.	
59	55	48	4	145	40	73	30	1	5	3	5	10	11	17	13	27	5	3	5	4	3	7	18	15	7	4	7	1
74			12	290		145	208	2									2											2
133	55	48	16	435	40	218	238	3	5	3	5	10	11	17	13	27	7	3	5	4	3	7	18	15	7	4	7	3
2	3	3	1	5	...	1	8	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	4
19	...	...	...	1	...	3	...	...	1	...	1	1	2	...	...	...	3	...	...	...	...	...	2	2	...	...	...	5
...	8	...	...	...	4	...	11	...	...	...	...	...	...	...	4	...	...	...	1	...	...	...	...	...	...	...	...	6
...	...	6	...	11	2	14	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	7
...	...	...	...	...	...	3	...	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	8
14	8	7	...	94	11	19	44	...	...	...	...	...	...	...	12	2	...	...	...	...	...	...	18	4	...	...	...	9
2	...	...	2	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	2	10
...	...	3	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
52	11	19	1	45	8	46	54	3	...	2	...	...	...	2	4	5	...	...	3	2	...	...	5	...	...	...	...	
5	2	...	2	25	...	...	12	...	...	...	2	6	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	2	...	...	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	
3	...	1	...	5	...	9	...	...	4	1	2	5	...	3	...	...	...	1	...	1	2	...	...	...	4	2	2	13
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
16	10	6	...	89	6	29	43	1	...	...	...	...	...	...	16	1	4	...	...	...	...	...	29	3	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	15
45	...	17	...	45	3	...	...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
2	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
40	...	3	...	25	10	...	...	...	...	...	2	...	...	...	...	5	...	...	...	1	...	...	...	...	3	2	...	17
3	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	2	...	...	...	32	...	...	...	...	3	...	7	...	...	...	...	...	...	10	20
253	65	70	...	544	69	525	206	13	...	15	...	...	...	14	...	32	15	...	10	15	...	...	...	...	40	14	...	21
30	3	15	16	188	...	...	53	...	...	...	6	19	...	...	...	6	13	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	5	...	15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	...	...	...	22
8	4	10	...	24	2	12	37	1	...	1	...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	
7	...	...	...	...	16	...	237	...	...	...	...	...	...	...	24	3	...	...	...	1	...	...	34	...	...	...	...	
...	...	...	...	123	...	118	19	...	...	...	...	...	...	15	...	...	...	...	...	...	...	12	...	...	...	...	...	23
...	...	...	...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
107	40	32	14	295	25	72	45	3	...	...	...	7	11	3	...	14	7	3	...	3	...	...	...	...	7	1	...	24
...	...	...	...	...	...	42	180	...	...	3	2	5	...	13	18	1	...	...	4	...	...	...	...	...	2	1	...	25
...	...	...	...	...	17	6	...	...	...	...	...	...	...	...	...	3	...	...	...	...	3	...	...	10	...	...	...	26
3	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	28
1	...	...	...	5	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
5	...	...	3	38	...	5	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
10	10	12	3	82	5	30	47	1	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	5	...	...	...	31
10	...	...	...	24	...	81	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
12	...	1	...	1	...	9	12	...	...	...	...	1	1	...	...	3	...	...	...	...	...	...	...	2	...	...	...	37
679	184	205	46	1,684	180	1,063	1,053	26	7	24	16	47	54	50	78	78	54	8	18	25	14	12	91	59	56	29	19	38
111	...	6	75	471	200	75	85	25	7	...	56	47	...	150	...	49	10	2	1	...	...	...	...	...	10	...	42	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
1,617	103	596	...	3,589	748	1,722	2,993	...	...	14	...	...	55	20	70	25	10	...	57	20	30	...	37	80	14	4	...	
1,120	...	...	...	599	...	267	193	...	...	...	...	...	...	...	...	13	9	...	...	...	...	...	...	...	...	...	...	40
...	2	...	43	...	...	10	57	...	...	2	...	...	...	...	...	18	...	...	...	...	...	...	...	...	...	...	24	41
...	207	...	6	134	...	813	170	...	5	...	...	...	...	...	...	19	...	...	...	12	...	...	186	43	4	4	...	42
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	43
...	...	...	...	159	...	...	140	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44
54	...	150	...	227	...	20	...	...	...	...	...	...	73	50	...	...	38	12	...	...	...	...	7	10	...	...	3	45
...	...	...	7	953	...	...	...	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...	
282	...	145	...	21	83	...	448	10	39	12	9	30	79	30	56	4	...	2	3	15	6	...	...	...	4	...	...	
223	...	...	...	1,192	...	...	18	...	...	...	...	...	...	...	...	69	...	...	...	...	...	...	...	...	...	...	...	46
...	...	...	...	...	...	...	350	...	...	...	...	8	...	...	...	66	...	...	...	...	...	326	...	...	...	...	...	47
...	...	35	...	...	6	28	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	...	48
7	...	...	...	16	5	...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	49
3	...	...	...	...	...	4	45	...	...	...	...	1	...	...	...	7	...	...	...	2	...	...	...	...	...	...	...	50
2	...	1	...	35	2	7	13	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	51
84	20	...	8	79	76	33	127	...	...	...	5	5	...	...	...	...	...	...	2	...	...	...	4	...	...	...	5	52
...	...	...	...	...	...	38	30	...	...	...	...	110	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	
59	...	...	...	...	...	...	65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53
...	83	...	...	...	...	476	...	...	10	...	...	...	...	...	...	150	...	...	...	...	...	...	...	160	...	...	...	54
2	...	...	4	21	...	24	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55
...	1	...	...	...	...	23	7	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	56
4	2	...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57
13	3	...	...	29	8	6	21	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	58
19	6	...	...	1	...	15	20	...	...	...	...	...	2	...	4	14	...	...	8	...	...	...	8	...	...	...	...	59
3,605	316	933	143	7,477	1,122	3,549	4,861	35	62	28	70	201	209	250	130	443	68	16	71	35	50	326	244	236	32	8	75	60
ACCOMMODATION FOR FEMALES																												
43	...	17	...	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
38	...	...	...	...	10	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
256	65	65	...	203	2	115	63	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
347	65	82	...	278	12	115	63	17	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

Number of, outlay on, and

Progressive No.	GAUGE.	5'6"						
	NUMBER.	1	2 (a)	3 (a) to (f)	4 (a)	5 (a) to (d)	6 (a) to (f)	7 (a) to (c)
	Particulars.	B. C.	B. N.	B. B. & C. I.	E. B. S.	E. I.	G. I. P.	M.
	ENGINES.							
	(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)							
1	Passenger engines — Number at close of 1903	...	51	84	51	144	...	46
2	Passenger engines — Number added in 1904	...	6	—2	8	...	...	8
3	Passenger engines — Number at close of 1904	...	**57**	**82**	**59**	**144**	...	**54**
4	Goods and mixed engines — Number at close of 1903	27	162	127	88	757	803	203
5	Goods and mixed engines — Number added in 1904	...	12	8	...	14	18	—1
6	Goods and mixed engines — Number at close of 1904	**27**	**174**	**135**	**88**	**771**	**821**	**202**
7	Total number of locomotives on the 31st December	27	231	217	147	915	821	256
8	Number per mile of line open of all classes	0·19	0·14	0·25	0·53	0·41	0·30	0·18
9	Average mileage run by each *per annum* — Passenger	...	27,325	23,189	22,212	34,543	25,619	29,080
10	Average mileage run by each *per annum* — Goods	...	19,276	8,918	21,380	20,897	18,693	21,403
11	Average mileage run by each *per annum* — All classes	20,122	21,605	17,231	21,713	23,045	20,870	23,022
12	Average mileage run by each *per diem* — Passenger	...	74	63	61	94	70	80
13	Average mileage run by each *per diem* — Goods	...	53	24	58	57	51	59
14	Average mileage run by each *per diem* — All classes	55	67	47	59	63	57	65
15	Ton-mileage hauled per engine, in thousands of tons	4,347	71,86	5,556	5,141	8,652	6,207	6,019
16	Average under repairs or renewals at any one time	3	36	38	17	136	175	52
17	Total value, in thousands of rupees	8,64	1,10,33	75,90	...	1,71,63	2,76,71	94,33
18	Total value per mile of line open	6,914	6,515	9,145	...	7,815	10,078	6,699
	COACHING STOCK.							
	(In the table below where the value of coaching stock is not shown it is included with that of Goods.)							
19	Number at close of 1903	119	911	634	571	2,323	2,224	1,182
20	Number added in 1904	—10	...	—2	18	57	19	19
21	Number at close of 1904	**109**	**911**	**632**	**589**	**2,380**	**2,243**	**1,201**
22	Number per mile of line open. — 1st class	0·09	0·04	0·04	0·19	0·08	0·05	0·07
23	Number per mile of line open. — 2nd class	0·07	0·03	0·07	0·14	0·06	0·08	0·08
24	Number per mile of line open. — Intermediate class	0·05	0·02	0·03	0·25	0·06	...	...
25	Number per mile of line open. — 3rd class	0·32	0·26	0·35	0·91	0·44	0·31	0·41
26	Number per mile of line open. — All other classes	0·31	0·19	0·27	0·62	0·42	0·37	0·29
27	Number per mile of line open. — Total of all classes	0·87	0·54	0·76	2·11	1·06	0·82	0·85
28	Average mileage run by each *per annum* — 1st class	14,571	32,687	...	24,014	55,521	47,786	33,819
29	Average mileage run by each *per annum* — 2nd class	28,863	44,731	...	30,833	80,204	49,941	30,098
30	Average mileage run by each *per annum* — Intermediate class	47,669	71,596	...	35,816	76,972	...	96,196
31	Average mileage run by each *per annum* — 3rd class	44,543	44,277	...	31,882	63,738	55,583	36,459
32	Average mileage run by each *per annum* — All other classes	26,145	35,204	...	22,937	32,131	40,019	30,550
33	Average mileage run by each *per annum* — Total of all classes	33,561	41,277	50,937	28,986	52,026	47,521	33,842
34	Average mileage run by each *per diem*	92	113	139	79	142	130	92
35	Freight ton-mileage per vehicle, in thousands of tons	28	34	52	29	46	35	29
36	Average under repairs or renewals at any one time	5	92	82	74	536	275	186
37	Total value, in thousands of rupees	...	62,58	37,81	...	...	1,10,73	...
38	Total value per mile of line open	...	3,695	4,556	...	...	4,033	...
	GOODS STOCK.							
39	Number at close of 1903 — Covered wagons	421	3,776	2,648	2,683	8,319	6,680	2,748
40	Number at close of 1903 — Open ,,	12	2,559	1,795	222	8,028	3,904	1,842
41	Number at close of 1903 — Timber trucks, including bolster trucks	58	50	20	67	...	241	185
42	Number at close of 1903 — All other classes	6	57	560	74	116	169	66
43	Number at close of 1903 — Total of all classes	497	6,442	5,018	3,046	16,463	10,994	4,841
44	Number added in 1904 — Covered wagons	10	...	79	101	...	460	59
45	Number added in 1904 — Open ,,	...	682	8	128	800	93	...
46	Number added in 1904 — Timber trucks, including bolster trucks	...	...	...	51	...	...	12
47	Number added in 1904 — All other classes	...	24	...	14	119	5	3
48	Number added in 1904 — Total of all classes	10	706	87	294	919	558	74
49	Number at close of 1904 — Covered wagons	**431**	**3,776**	**2,722**	**2,784**	**8,319**	**7,140**	**2,807**
50	Number at close of 1904 — Open ,,	**12**	**3,241**	**1,803**	**350**	**8,828**	**3,997**	**1,842**
51	Number at close of 1904 — Timber trucks, including bolster trucks	**58**	**50**	**20**	**118**	...	**241**	**197**
52	Number at close of 1904 — All other classes	**6**	**81**	**560**	**88**	**235**	**174**	**69**
53	Number at close of 1904 — Total of all classes	**507**	**7,148**	**5,105**	**3,340**	**17,382**	**11,552**	**4,915**
54	Number of all classes per mile of line open	3·65	4·23	5·09	11·99	7·91	4 21	3·49
55	Average mileage run by each *per annum*	8,728	14,112	9,546	9,293	18,436	13,708	12,943
56	Average mileage run by each *per diem*	24	38	26	25	50	38	35
57	Average tare in tons — Covered wagons	7·72	8·23	6·84	7·66	7·13	7 53	7·84
58	Average tare in tons — Open ,,	7·53	7·81	6·14	7·06	6·65	6·71	6·45
59	Average carrying capacity in tons. — Covered wagons	12·39	14·95	14·40	12·52	14·86	14·36	13·96
60	Average carrying capacity in tons. — Open ,,	17·00	15 85	14·02	15 01	14 64	14·19	13·45
61	Average load of a goods vehicle, loaded and empty, per mile	3·67	6 43	6·63	5·31	7·31	6 23	5·00
62	Freight ton-mileage per vehicle, in thousands of tons	35	57	62	50	148	49	67
63	Average under repairs or renewals at any one time	27	255	235	218	550	575	380
64	Total value, in thousands of rupees	19,67	1,99,28	1,03,63	...	...	2,51,52	...
65	Total value per mile of line open	15,734	11,766	12,485	...	...	9,161	...
66	Grand total value of rolling-stock, in thousands of rupees	28,31	3,72,19	2,17,34	1,62.52	11,62,27	6,38,96	2,74,73
67	Grand total value of rolling-stock per mile of line open	22,648	21,976	26,186	58,318	52,922	23,272	19,511

DIX 23.

work done by Rolling-stock.

			3′ 3½″												
9 (a) & (b)	10 (a) to (e)	11 (a) & (b)	12 (a) & (b)	13 (a) & (b)	14 (a) & (b)	15 (a) to (d)	16	17	18 (a) & (b)	4 (b) & (c)	9 (c)	19 (a) to (c)	7 (d) & (e)	3 (g) to (l)	Progressive No.
N. G. S.	N. W.	O. & B.	A. B.	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D. S.	E. B. S. M.	H. G. V.	J. B.	N. & S. C.	B. M.	
ENGINES.															
(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)															
4	...	48	...	20	...	...	28	...	...	...	...	...	4	145	1
1	...	10	...	...	...	...	...	...	...	...	...	...	...	...	2
5	...	**58**	...	**20**	...	...	**28**	...	...	...	...	...	**4**	**145**	3
57	700	145	63	205	10	37	208	4	22	125	55	48	5	287	4
—1	19	—1	9	...	...	...	...	...	...	8	...	...	7	3	5
56	**719**	**144**	**72**	**205**	**10**	**37**	**208**	**4**	**22**	**133**	**55**	**48**	**12**	**290**	6
61	719	202	72	225	10	37	236	4	22	133	55	48	16	435	7
0·17	0·19	0·16	0·09	0·16	0·06	0·08	0·18	0·88	0·25	0·24	0·14	0·06	0·20	0·22	8
18,260	...	42,586	...	23,993	..	...	30,228	...	...	26,518	...	...	18,344	22,617	9
18,543	...	14,894	...	18,029	...	...	17,612	...	...	18,348	...	...	10,655	14,911	10
18,520	27,124	27,602	19,726	5,984	27,738	16,260	23,058	...	14,752	21,970	15,904	23,521	12,706	17,480	11
50	...	116	...	65	...	...	83	...	...	72	...	...	50	62	12
51	...	41	...	49	...	...	48	...	...	50	...	...	46	41	13
51	74	75	54	11	76	45	62	...	40	60	43	64	43	45	14
6,097	8,373	7,372	3,021	4,279	...	2,664	4	...	...	3,280	2,849	4,372	1,524	3,256	15
12	...	27	8	31	...	1	21	1	6	23	7	7	2	68	16
24,33	2,51,98	60,83	...	62,42	2,70	7,56	69,97	...	...	...	16,65	13,69	3,62	80,69	17
6,860	6,618	4,857	...	4,440	1,765	1,661	5,221	...	...	...	4,257	1,686	4,430	4,129	18
COACHING STOCK.															
(In the table below where the value of coaching stock is not shown it is included with that of Goods.)															
189	2,365	850	216	926	73	264	958	12	81	632	164	185	44	1,691	19
1	4	2	25	16	—10	—9	35	...	1	47	...	20	2	—7	20
190	**2,369**	**852**	**239**	**942**	**63**	**255**	**993**	**12**	**82**	**679**	**164**	**205**	**46**	**1,684**	21
0·11	0·04	0·08	0·03	0·06	...	0·06	0·06	...	...	0·10	0·07	0·03	0·08	0·08	22
0·05	0·04	0·05	0·02	0·04	...	0·04	0·07	...	...	0·07	0·04	0·02	0·03	0·07	23
...	0·04	0·05	0·01	0·03	...	0·03	...	...	...	0·10	...	0·02	...	0·03	24
0·19	0·25	0·29	0·11	0·38	...	0·31	0·29	...	0·45	0·46	0·18	0·12	0·20	0·47	25
0·19	0·25	0·21	0·14	0·16	...	0·13	0·22	...	0·48	0·26	0·13	0·05	0·25	0·25	26
0·54	0·62	0·63	0·31	0·67	0·44	0·57	0·74	2·51	1·06	0·99	0·42	0·24	0·56	0·90	27
...	49,378	5,064	55,421	50,016	...	...	24,922	...	...	...	25,825	...	10,323	...	28
...	46,590	3,445	43,691	62,570	...	...	27,785	...	...	...	41,495	...	22,156	...	29
...	60,783	3,080	85,886	90,185	...	...	...	...	...	...	...	...	...	...	30
...	61,878	19,210	58,300	65,231	...	...	37,561	...	...	...	56,294	...	25,693	...	31
...	30,946	13,677	19,305	41,228	...	...	29,759	...	...	...	37,026	...	11,549	...	32
38,056	47,667	44,476	40,912	51,290	...	28,547	33,284	...	...	...	44,243	52,312	17,139	38,663	33
106	131	122	719	140	...	78	91	...	...	...	121	143	47	106	34
27	37	35	21	35	...	19	27	...	...	21	27	31	24	23	35
22	272	128	38	54	4	14	90	...	9	84	12	15	5	118	36
...	...	...	...	...	...	7,85	51,19	...	...	...	8,49	...	...	...	37
...	...	...	...	...	...	1,722	3,820	...	...	...	2,170	...	...	...	38
GOODS STOCK.															
161	2,004	4,788	1,103	5,558	244	293	2,823	4	133	2,695	400	562	75	4,416	39
735	2,917	...	454		68	705	1,021	4	714	558	386	295	56	2,677	40
10	320	627	71	279	12	22	350	...	50	84	20	...	8	79	41
74	277	46	83	31	4	23	194	...	2	108	10	36	...	98	42
930	11,518	5,461	1,711	5,868	328	1,048	4,388	8	899	3,445	816	593	139	7,270	43
...	48	96	112	153	19	...	541	...	90	153	3	40	4	203	44
24	...	...	12		1	...	44	...	100	—61	—4	...	...	...	45
...	...	19	1	...	...	...	5	...	...	...	...	...	...	...	46
4	...	1	2	4	...	...	7	...	...	68	1	...	...	4	47
23	48	116	101	157	20	...	597	...	190	160	...	40	4	207	48
161	**8,052**	**4,884**	**1,215**	**5,711**	**263**	**298**	**3,364**	**4**	**223**	**2,848**	**403**	**602**	**79**	**4,619**	49
759	**2,917**	...	**442**		**69**	**705**	**1,065**	**4**	**814**	**497**	**382**	**295**	**56**	**2,677**	50
10	**320**	**646**	**70**	**279**	**12**	**22**	**355**	...	**50**	**84**	**20**	...	**8**	**79**	51
78	**277**	**47**	**85**	**35**	**4**	**23**	**201**	...	**2**	**176**	**11**	**36**	...	**102**	52
1,008	**11,566**	**5,577**	**1,812**	**6,025**	**348**	**1,048**	**4,955**	**8**	**1,089**	**3,605**	**816**	**933**	**143**	**7,477**	53
2·34	3·64	4·45	2·34	4·29	2·17	2·30	3·72	1·67	11·05	5·23	2·09	1·13	1·75	3·90	54
15,486	23,073	16,570	7,·31	11,587	...	6,091	10,291	...	...	...	9,359	10,693	5,279	14,103	55
42	63	45	19	32	...	17	28	...	...	...	26	29	14	39	56
7·24	7·54	7·22	4·90	3·43	...	3·72	4·57	...	...	4·40	4·67	3·89	8·26	3·97	57
6·97	7·12	...	2·00		...	3·13	3·79	...	...	3·22	4·03	4·43	7·98	4·30	58
12·03	15·79	12·34	10·31	9·36	...	6·37	9·54	...	...	7·99	10·85	9·44	17·97	9·62	59
16·41	13·85	...	6·62		...	6·52	8·80	...	...	7·09	11·00	12·76	19·12	12·43	60
6·90	7·16	5·64	4·18	3·92	...	2·58	3·45	...	...	3·29	3·71	3·65	3·81	4·34	61
107	168	55	28	38	...	16	41	...	...	29	35	52,131	20	49	62
76	345	109	194	135	9	34	593	...	31	200	35	21	2	205	63
30,05	4,48,20	1,64,94	...	1,33,64	9,33	12,52	88,70	...	...	...	13,19	26,46	9,27	1,57,86	64
8,473	11,775	18,028	...	9,056	6,099	2,751	6,693	...	...	...	3,372	3,210	11,346	8,073	65
54,38	7,00,18	2,25,77	75,71	1,96,06	12,03	27,94	2,10,96	...	23,74	1,16,67	38,33	40,35	12,89	2,38,49	66
15,338	16,393	22,885	10,226	13,946	7,863	6,134	15,734	..	30,902	16,933	9,799	4,596	15,776	12,202	67

Progressive No.	GAUGE.	3′ 3½″—*contd.*				2′ 6″				
	CLASSIFICATION NUMBER.	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*h*)	23	25	26	4 (*d*)	4 (*b*)	3 (*m*) & (*n*)
	Particulars.	B. & K.	S. I.	S. M.	U. C.	B. L.	B. B.	C. B.	E. B. S.	G. D. & E.
	ENGINES.									
	(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)									
1	Passenger engines. Number at close of 1903	...	73	30	1	...	...	...	...	...
2	Passenger engines. Number added in 1904	...	...	...	...	...	...	...	...	...
3	Passenger engines. Number at close of 1904	...	73	30	1	...	...	...	...	...
4	Goods and mixed engines. Number at close of 1903	41	145	208	2	5	3	3	12	13
5	Goods and mixed engines. Number added in 1904	−1	...	...	...	...	...	2	−2	−2
6	Goods and mixed engines. Number at close of 1904	40	145	208	2	5	3	5	10	11
7	Total number of locomotives on the 31st December	40	218	238	3	5	3	5	10	11
8	Number per mile of line open of all classes	0·14	0·16	0·14	0·04	0·23	0·16	0·15	0·29	0·08
9	Average mileage run by each *per annum*. Passenger	...	29,207	22,263	...	...	...	...	7,496	...
10	Average mileage run by each *per annum*. Goods	...	14,886	16,170	...	...	...	...	8,929	...
11	Average mileage run by each *per annum*. All classes	20,428	21,616	19,236	18,356	19,052	9,826	18,629	8,624	10,102
12	Average mileage run by each *per diem*. Passenger	...	80	61	...	...	...	...	20	...
13	Average mileage run by each *per diem*. Goods	...	41	44	...	...	...	...	24	...
14	Average mileage run by each *per diem*. All classes	56	59	53	50	53	27	51	24	28
15	Ton-mileage hauled per engine, in thousands of tons	2,920	3,522	3,377	2,820	...	...	...	...	...
16	Average under repairs or renewals at any one time	6	42	38	...	1	...	...	2	3
17	Total value, in thousands of rupees	...	47,77	48,49	95	1,27	70	...	...	1,44
18	Total value per mile of line open	...	3,529	2,945	1,384	5,892	3,786	...	...	1,694
	COACHING STOCK.									
	(In the table below where the value of coaching stock is not shown it is included with that of Goods.)									
19	Number at close of 1903	173	1,014	1,053	26	7	23	16	47	54
20	Number added in 1904	7	49	...	...	...	1	...	...	...
21	Number at close of 1904	180	1,063	1,053	26	7	24	16	47	54
22	Number per mile of line open. 1st class	0·08	0·06	0·06	0·03	...	...	2·00	0·12	0·06
23	Number per mile of line open. 2nd class	0·04	0·05	0·05	0·03	...	...	1·00	0·13	...
24	Number per mile of line open. Intermediate class	0·03	...	...	...	...	0·11	3·39	0·09	...
25	Number per mile of line open. 3rd class	0·31	0·50	0·33	0·22	0·09	0·81	8·43	0·94	0·26
26	Number per mile of line open. All other classes	0·16	0·17	0·20	0·06	0·23	0·32	1·18	0·35	0·11
27	Number per mile of line open. Total of all classes	0·26	0·78	0·64	0·37	0·32	1·30	16·00	1·33	0·43
28	Average mileage run by each *per annum*. 1st class	...	31,868	...	...	...	...	...	...	...
29	Average mileage run by each *per annum*. 2nd class	...	42,193	...	...	...	...	...	...	...
30	Average mileage run by each *per annum*. Intermediate class	...	...	...	...	...	...	...	...	...
31	Average mileage run by each *per annum*. 3rd class	...	46,850	...	...	...	...	...	...	...
32	Average mileage run by each *per annum*. All other classes	...	31,556	...	...	...	...	...	...	...
33	Average mileage run by each *per annum*. Total of all classes	36,867	42,041	27,192	19,979	...	...	...	...	...
34	Average mileage run by each *per diem*	101	115	74	55	...	...	...	...	...
35	Freight ton-mileage per vehicle, in thousands of tons	20	37	20	18,664	...	...	...	...	...
36	Average under repairs or renewals at any one time	19	59	55	2	2	...	2	4	...
37	Total value, in thousands of rupees	...	41,16	...	1,19	...	...	...	...	1,29
38	Total value per mile of line open	...	3,042	...	1,734	...	...	...	...	975
	GOODS STOCK.									
39	Number at close of 1903. Covered wagons	966	2,902	3,324	25	7	10	56	47	38
40	Number at close of 1903. Open ,,	75	1,322	1,064	10	15	2	9	34	169
41	Number at close of 1903. Timber trucks, including bolster trucks	76	51	267	...	39	...	...	2	...
42	Number at close of 1903. All other classes	14	6	206	...	1	8	...	117	2
43	Number at close of 1903. Total of all classes	1,131	3,381	4,861	35	62	20	65	100	209
44	Number added in 1904. Covered wagons	−18	123	10	...	...	4	...	...	17
45	Number added in 1904. Open ,,	8	25	−10	...	...	...	...	...	−17
46	Number added in 1904. Timber trucks, including bolster trucks	...	20	...	...	...	...	5	...	...
47	Number added in 1904. All other classes	1	...	...	...	...	4	...	1	...
48	Number added in 1904. Total of all classes	−9	168	...	...	...	8	5	1	...
49	Number at close of 1904. Covered wagons	948	2,125	3,334	25	7	14	56	47	55
50	Number at close of 1904. Open ,,	83	1,947	1,054	10	15	2	9	34	152
51	Number at close of 1904. Timber trucks, including bolster trucks	76	71	267	...	39	...	5	2	...
52	Number at close of 1904. All other classes	15	6	206	...	1	12	...	118	2
53	Number at close of 1904. Total of all classes	1,123	3,549	4,861	35	62	28	70	201	209
54	Number of all classes per mile of line open	3·86	2·62	2·95	0·50	2·36	1·51	2·06	2·28	1·67
55	Average mileage run by each *per annum*	7,867	11,594	11,681	11,138	...	...	...	...	...
56	Average mileage run by each *per diem*	22	32	32	31	...	...	...	...	...
57	Average tare in tons. Covered wagons	3·90	4·33	3·83	4·02	5·90	2·75	3·32	2·79	...
58	Average tare in tons. Open ,,	2·80	3·38	3·27	3·22	5·35	2·50	2·15	4·17	...
59	Average carrying capacity in tons. Covered wagons	11·07	7·59	7·57	7·40	14·10	6·00	3·79	4·35	...
60	Average carrying capacity in tons. Open ,,	8·00	7·07	7·02	6·29	14·65	6·00	5·00	9·79	...
61	Average load of a goods vehicle, loaded and empty, per mile	3·83	3·56	3·48	1·92	9·09	...	...	...	...
62	Freight ton-mileage per vehicle, in thousands of tons	27	43	39	15,052	...	4	...	...	...
63	Average under repairs or renewals at any one time	39	162	39	...	4	...	4	16	...
64	Total value, in thousands of rupees	...	52,31	1,01,23	58	2,88	1,71	...	...	1,45
65	Total value per mile of line open	...	3,865	6,150	845	13,333	9,232	...	...	1,101
66	Grand total value of rolling-stock, in thousands of rupees	40,58	1,41,24	1,49,72	2,72	4,15	2,41	1,88	2,20	4,18
67	Grand total value of rolling-stock per mile of line open	13,945	10,436	9,095	3,963	19,220	13,018	5,598	3,994	3,179

DIX 23—*concld.*

work done by Rolling-stock.

2' 6"								2' 0"						Progressive No.
2 (*b*) & (*d*),	29	10 (*f*) & (*g*)	31	2 (*c*)	20 (*c*)	33	34	10 (*h*)	36	6 (*g*)	37	38	39	
J. G. E. & R. D.	K. S.	K. K. T. & N. D.	M.R.W.	P. L. L.	P. W. L.	B. P.	T. B.	D. L.	D. H.	G. L.	H. A.	H. S.	J.	
ENGINES.														
(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)														
...	...	...	4	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	4	...	...	...	...	...	...	...	...	...	...	3
16	12	28	3	8	5	4	3	7	16	11	7	4	7	4
1	1	—1	...	...	...	...	...	...	2	4	...	...	...	5
17	13	27	3	3	5	4	3	7	16	15	7	4	7	6
17	13	27	7	3	5	4	3	7	18	15	7	4	7	7
0·06	0·22	0·21	0·07	0·12	0·13	0·12	0·15	1·13	0·35	0·08	0·24	0·20	0·28	8
...	...	...	28,588	...	...	...	...	...	...	...	...	...	...	9
...	...	...	16,433	...	...	...	...	...	...	...	...	...	...	10
12,312	16,260	13,213	24,598	6,361	12,571	23,901	...	...	14,108	9,016	33,015	8,227	...	11
...	...	...	78	...	...	...	...	...	...	...	...	...	...	12
...	...	...	45	...	...	...	...	...	...	...	...	...	...	13
34	45	36	67	17	34	65	...	...	39	25	35	24	...	14
1,465	736	...	...	430	...	...	...	...	...	...	...	...	...	15
1	1	...	1	...	1	1	1	...	2	2	...	...	...	16
5,22	...	...	1,22	76	...	68	60	...	3,21	1,53	1,65	65	...	17
1,934	...	...	1,297	3,081	...	2,056	2,988	...	6,304	3,90	4,446	3,280	...	18
COACHING STOCK.														
(In the table below where the value of coaching stock is not shown it is included with that of Goods.)														
34	74	64	54	8	18	25	13	12	91	40	56	20	19	19
16	4	14	...	...	...	...	1	...	...	19	...	...	...	20
50	78	78	54	8	18	25	14	12	91	59	56	20	19	21
0·01	0·30	0·03	0·07	0·06	0·05	0·07	0·20	...	0·44	0·05	...	...	0·07	22
0·01	0·30	0·03	0·06	...	0·05	0·04	...	...	0·62	0·01	...	...	...	23
...	...	0·03	...	...	...	0·07	...	...	...	...	...	...	...	24
0·14	0·40	0·33	0·35	0·14	0·33	0·53	0·35	...	0·67	0·16	1·39	0·71	0·33	25
0·02	0·30	0·20	0·09	0·13	0·03	0·11	0·15	...	0·06	0·08	0·56	0·30	0·20	26
0·18	1·31	0·61	0·57	0·32	0·46	0·81	0·70	...	1·79	0·32	1·95	1·01	0·63	27
33,969	3,721	19,912	...	18,189	...	...	...	...	2,733	...	...	...	...	28
33,969	3,486	12,736	...	...	...	...	...	...	1,952	...	...	...	...	29
28,556	...	4,967	...	...	...	...	...	...	...	...	...	...	...	30
22,518	3,366	21,325	...	14,672	...	...	...	...	1,809	...	...	...	...	31
31,217	6,186	14,930	...	7,340	...	...	...	...	20,500	...	...	...	...	32
27,343	5,736	18,278	...	11,945	...	...	...	...	26,995	...	...	...	...	33
75	16	50	...	33	...	...	...	...	74	...	...	...	...	34
10	4	...	...	8	...	...	...	...	...	...	...	...	...	35
...	5	2	6	...	2	...	...	...	...	...	...	...	...	36
2,70	...	...	1,26	31	...	69	...	...	...	...	...	...	...	37
1,000	...	...	1,330	1,245	...	2,058	...	...	...	...	...	...	...	38
GOODS STOCK.														
170	1	74	20	2	58	20	30	...	37	65	14	4	42	39
80	6	32	47	14	...	15	15	...	153	53	8	4	24	40
...	...	7	...	...	2	...	2	...	17	...	...	...	...	41
...	...	54	1	...	11	...	...	326	6	101	10	...	9	42
250	75	167	68	16	71	35	50	326	212	219	32	8	75	43
...	55	...	...	...	...	...	...	...	...	15	...	...	...	44
...	...	153	...	...	...	...	...	...	30	2	...	...	...	45
...	...	14	...	...	...	...	...	...	...	...	...	...	...	46
...	...	108	...	...	...	...	...	...	2	...	...	...	...	47
...	55	275	...	...	...	...	...	...	32	17	...	...	...	48
170	70	74	20	2	58	20	30	...	37	80	14	4	42	49
80	60	185	47	14	...	15	18	...	182	55	8	4	24	50
...	...	21	...	...	2	...	2	...	19	...	...	...	...	51
...	...	162	1	...	11	...	...	326	6	101	10	...	9	52
250	130	442	68	16	71	35	50	326	244	236	32	8	75	53
0·92	2·19	3·35	0·74	0·65	1·82	1·12	2·50	0·53	4·79	1·28	1·11	0·41	2·48	54
6,848	...	3,531	...	2,916	...	...	...	...	...	...	...	...	...	55
19	...	9	...	8	...	...	...	...	...	...	...	...	...	56
7·45	...	4·50	3·25	6·98	3·13	2·75	...	...	...	...	2·75	2·75	...	57
4·59	...	1·33	3·80	4·06	...	2·75	...	...	...	...	2·50	2·50	...	58
16.35	6·50	8·64	4·50	9·04	4·76	5·00	...	...	3·70	...	5·00	5·00	...	59
9·63	5·00	3·43	7·10	7·38	...	5·00	...	...	3·70	...	5·00	5·00	...	60
4·11	2·35	...	...	3·06	...	...	...	...	...	...	...	...	...	61
28	9	...	...	9	...	...	...	...	8	...	...	...	...	62
...	...	7·92	7	...	4	...	...	...	...	...	...	...	...	63
3,78	...	...	1,37	40	...	53	1,00	...	3,51	4,02	3,26	1,03	...	64
3,252	...	...	1,457	1,689	...	1,591	5,632	...	68,788	2,191	8,760	5,224	...	65
16,70	7,86	12,82	3,85	1,48	1,42	1,90	1,60	...	6,72	5,55	4,91	1,68	2,03	66
6,186	13,216	9,711	4,084	6,015	3,595	5,705	8,020	...	75,092	3,081	13,206	8,504	6,713	67

APPENDIX 24.

Rolling-stock fitted with automatic brakes at close of 1904.

Number.		Gauge.	Railway system.* (*Vide* Appendix 1.)	Locomotives.			Coaching vehicles including all brake-vans.				Goods vehicles, excluding cranes.			
Main head.	Sub-head.			Fitted.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.
1	...	5′ 6″	Bengal Central	5	22	18·52	...	3	106	2·75	...	...	505	...
2	(*a*)		Bengal-Nagpur	116	115	50·22	674	23	214	76·51	986	10	6,141	13·96
3	(*a*) to (*f*)		Bombay, Baroda and Central India	172	45	79·26	491	7	134	78·80	2	45	5,054	0·92
4	(*a*)		Eastern Bengal State	113	35	76·19	460	43	66	88·79	...	11	3,324	0·33
5	...		East Indian	437	478	47·76	1,451	91	838	64·79	35	78	17,240	0·65
6	(*a*) to (*f*)		Great Indian Peninsula Indian Midland	464	357	56·52	1,596	23	624	72·18	...	163	11,332	1·42
7	(*a*) to (*c*)		Madras	130	126	50·78	900	31	270	77·52	...	14	4,886	0·29
9	(*a*) & (*b*)		Nizam's Guaranteed State	...	61	...	56	4	130	31·58	...	...	1,006	...
10	(*a*) to (*e*)		North Western State	635	84	88·32	2,024	90	255	89·24	802	103	10,609	7·86
11	(*a*) & (*b*)		Oudh and Rohilkhand State	113	90	55·45	701	49	102	88·03	27	16	5,523	0·67
12	...	5′ 3″	Assam-Bengal	63	9	87·50	226	2	17	95·40	102	5	1,690	5·95
13	...		Bengal and North-Western	50	175	22·22	144	8	790	16·14	...	2	6,004	0·03
14	...		Bengal Dooars	...	10	...	...	...	63	...	...	...	345	...
15	...		Bhavnagar-Gondal-Junagad-Porbanbar	...	37	...	...	...	255	...	...	...	1,046	...
16	(*a*)		Burma	128	108	54·24	419	34	540	45·62	156	9	4,790	3·33
17	...		Deoghur	...	4	...	...	...	12	...	...	...	8	...
18	...		Dibru-Sadiya	...	22	...	...	...	82	...	...	...	1,068	...
4	(*b*) & (*c*)	3′ 3½″	Eastern Bengal State	96	37	72·18	443	41	195	71·28	...	2	3,590	0·06
9	(*c*)		Hyderabad-Godavari Valley	...	55	...	...	...	164	...	...	...	814	...
19	...		Jodhpur-Bikaner	...	48	...	...	...	205	...	...	...	933	...
7	(*d*) & (*e*)		Nilgiri and Shoranur-Cochin	4	12	25·00	12	1	33	28·26	16	...	127	11·19
3	(*g*) to (*l*)		Rajputana-Malwa	45	390	10·34	26	19	1,639	2·67	...	...	7,448	...
20	(*a*) & (*b*)		Rohilkund and Kumaon	10	30	25·00	...	...	180	...	...	...	1,114	...
21	...		South Indian	29	189	13·30	181	2	880	17·22	...	...	3,543	...
22	...		Southern Mahratta	...	238	...	...	...	1,053	...	...	...	4,840	...
23	...		Udaipur-Chitor	...	3	...	...	...	26	...	...	...	35	...
25	...	2′ 6″	Barsi Light	...	5	...	...	...	7	...	...	...	61	...
26	...		Bukhtiarpore-Behar Light	...	3	...	...	...	24	...	...	...	28	...
4	(*d*)		Cooch Behar including 2′ 6″ gauge branches of Eastern Bengal State Railway.	...	15	...	...	...	63	...	...	...	271	...
3	(*m*) & (*n*)		Gaekwar's Dabhoi and Rajpipla	...	11	...	...	...	54	...	...	...	209	...
2	(*b*) & (*d*)		Jubbulpore-Gondia and Raipur-Dhamtari	10	7	58·82	23	...	22	56·00	175	...	75	70·00
29	...	2′ 0″	Kalka-Simla	12	1	92·31	78	...	...	100·00	70	60	...	100·00
10	(*f*) & (*g*)		Khushalgarh-Kohat-Thal and Nowshera-Durgai	...	27	...	...	...	78	...	...	...	442	...
31	...		Morvi	...	7	...	...	...	54	...	...	...	68	...
2	(*c*)		Parlakimedi Light	...	3	...	...	...	8	...	...	...	16	...
20	(*c*)		Powayan Light	...	5	...	...	...	18	...	...	...	71	...
33	...		Tarakeshwar-Magra Light	...	4	...	...	...	25	...	...	...	35	...
34	...		Tezpore-Balipara Light	...	3	...	...	...	14	...	...	...	50	...
10	(*h*)	2′ 0″	Dandot Light	...	7	...	...	...	12	...	...	...	326	...
36	...		Darjeeling-Himalayan	...	18	...	...	...	91	...	...	...	244	...
6	(*g*)		Gwalior Light	...	15	...	...	...	59	...	...	...	236	...
37	...		Howrah-Amta Light	...	7	...	...	...	56	...	...	...	32	...
38	...		Howrah-Sheakhala Light	...	4	...	...	...	20	...	...	...	8	...
39	...		Jorhat State	...	7	...	...	...	19	...	...	...	74	...
			Total	2,630	2,929	47·31	9,930	471	9,491	52·29	2,371	512	105,281	2·67

APPENDIX 25.

Rolling-stock lighted by gas and electricity at close of 1904.

Numbers.		Gauge.	Railway system. (*Vide* Appendix 1.)	Number of coaching vehicles fitted for lighting with			Number of coaching vehicles not fitted.	Proportion per cent. of fitted to total.	Remarks.
Main head.	Sub-head.			Gas.	Electricity.	Total.			
1	...	5′ 6″	Bengal Central	...	...	..	109	...	
2	(*a*)		Bengal-Nagpur	632	1	633	227	73·60	
3	(*a*) to (*f*)		Bombay, Baroda and Central India	404	1	405	7	98·30	
4	(*a*)		Eastern Bengal State	460	1	461	122	79·07	
5	...		East Indian	1,219	3	1,222	423	74·29	
6	(*a*) to (*f*)		Great Indian Peninsula Indian Midland	1,302	11	1,313	129	91·05	
7	(*a*) to (*c*)		Madras	960	...	960	194	83·48	
9	(*a*) & (*b*)		Nizam's Guaranteed State	120	...	120	59	67·04	
10	(*a*) to (*e*)		North Western State	1,793	...	1,793	313	85·14	
11	(*a*) & (*b*)		Oudh and Rohilkhand State	672	...	672	180	78·87	
12	...	3′ 3½″	Assam-Bengal	205	...	205	9	95·79	
13	...		Bengal and North-Western	...	...	...	942	...	
14	...		Bengal Dooars	...	...	...	63	...	
15	...		Bhavnagar-Gondal-Junagad-Porbandar	...	...	...	255	...	
16	...		Burma	...	19	19	901	2·07	
17	...		Deoghur	...	...	...	12	...	
18	...		Dibru-Sadiya	...	...	...	82	...	
4	(*b*) & (*c*)		Eastern Bengal State	486	...	486	188	72·11	
9	(*c*)		Hyderabad-Godavari Valley	114	...	114	50	71·26	
19	...		Jodhpur-Bikaner	...	44	44	154	22·22	
7	(*d*) & (*e*)		Nilgiri and Shoranur-Cochin	...	...	...	43	...	
3	(*g*) to (*l*)		Rajputana-Malwa	...	238	238	1,408	14·46	
20	(*a*) & (*b*)		Rohilkund and Kumaon	...	...	...	180	...	
21	...		South Indian	...	95	95	861	9·94	
22	...		Southern Mahratta	970	...	970	55	94·63	
23	...		Udaipur-Chitor	...	...	...	26	...	
25	...	2′ 6″	Barsi Light	...	...	...	7	...	
26	...		Bukhtiarpore-Bihar Light	...	...	...	24	...	
4	(*d*)		Cooch Behar including 2′ 6″ gauge branches of Eastern Bengal State Railway.	...	...	...	68	...	
8	(*m*) & (*n*)		Gaekwar's Dabhoi and Rajpipla	...	...	...	54	...	
2	(*b*) & (*d*)		Jubbulpore-Gondia and Raipur-Dhamtari.	28	...	28	22	56·00	
29	...		Kalka-Simla	...	72	72	6	92·30	
10	(*f*) & (*g*)		Khushalgarh-Kohat-Thal and Nowshera-Durgai.	...	...	...	78	...	
31	...		Morvi	...	...	...	54	...	
2	(*c*)		Parlakimedi Light	...	...	...	8	...	
20	(*c*)		Powayan Light	...	...	...	18	...	
33	...		Tarakeshwar-Magra Light	...	...	...	25	...	
34	...		Tezpore-Balipara Light	...	...	...	14	...	
10	(*h*)	2′ 0″	Dandot Light	...	...	...	12	...	
36	...		Darjeeling-Himalayan	...	...	...	91	...	
6	(*g*)		Gwalior Light	...	...	...	59	...	
37	...		Howrah-Amta Light	...	...	...	56	...	
38	...		Howrah-Sheakhala Light	...	...	...	20	...	
39	...		Jorhat State	...	...	...	19	...	
			Total	9,385	485	9,870	7,622	56·43	

APPENDIX 26.

Railways on which points and signals were interlocked and on which block instruments were used for train signalling at close of 1904.

Number. Main head.	Number. Sub-head.	Gauge.	Railway system. (*Vide* Appendix 1.)	Total number of stations on railway.	Stations at which points and signals were interlocked. No.	Stations at which points and signals were interlocked. Name of system of interlocking.	Stations at which block instruments were used for train signalling. No.	Stations at which block instruments were used for train signalling. Name of block instrument.
1	...	5′ 6″	Bengal Central	27	...	...	...	...
2	(a)	5′ 6″	Bengal-Nagpur	231	88	87 List and Morse's 1 Experimental	18	5 Webb and Thomson's. 9 Theobald's Train Key. 4 Experimental.
3	(a) to (f)	5′ 6″	Bombay, Baroda and Central India	132	30	21 Mackenzie and Holland's. 9 Experimental	78	68 Preece's single wire semaphore. Does not give out a token or tablet. 10 Experimental.
4	(a)	5′ 6″	Eastern Bengal State	84	25	21 Ordinary double line interlocking 4 Experimental	17	Pryce and Ferreira's. Token not necessary.
5	...	5′ 6″	East Indian	373	141	89 English system 51 Dutton's 1 Experimental	126	75 Pryce and Ferreira's. Token not necessary. 20 Tyer's Tablet. 17 Tyer's automatic. 14 Experimental.
6	(a)	5′ 6″	Great Indian Peninsula	237	31	24 Saxby and Farmer's 7 Experimental	236	234 Preece's single wire semaphore. Does not give out a token or tablet. At 15 of these stations two kinds of instruments are used. 18 Experimental.
6	(c) to (f)	5′ 6″	Indian Midland	159	15	11 Wrench's 4 Experimental	27	Preece's. Does not give out a token or tablet.
7	(a) to (c)	5′ 6″	Madras	290	54	37 List and Morse's 17 Experimental	193	105 Winter's Block with starting semaphores. Does not give out a token or tablet. 20 Winter's Block without starting semaphores. Does not give out a token or tablet. 68 Theobald's Train Key.
9	(a) & (b)	5′ 6″	Nizam's Guaranteed State	45	1	Dutton's	...	...
10	(a) to (e)	5′ 6″	North Western State	541	297	248 List and Morse's 26 Tappet 20 Key locking 3 Experimental	10	9 Tyer's Tablet. 1 Experimental.
11	...	5′ 6″	Oudh and Rohilkhand State	177	95	78 List and Morse's 11 Wrench's 6 Experimental	...	...
12	...	5′ 6″	Assam-Bengal	109	...	...	...	...
13	...	5′ 6″	Bengal and North-Western	264	...	...	...	...
14	...	5′ 6″	Bengal-Dooars	28	...	...	...	...
15	...	5′ 6″	Bhavnagar-Gondal-Junagad-Porbandar	64	2	Experimental	4	2 Tyer's Tablet. 2 Theobald's Train Key.
16	...	5′ 6″	Burma	229	10	8 List and Morse's 2 Experimental		
17	...	5′ 6″	Deoghur	1	...	...	...	...
18	...	5′ 6″	Dibru-Sadiya	16	...	...	...	...
4	(b) & (c)	5′ 6″	Eastern Bengal State	129	20	19 List and Morse's 1 Experimental	20	Tyer's Tablet.
9	(c)	3′ 3¾″	Hyderabad-Godavari Valley	45	41	List and Morse's	...	...
19	...	3′ 3¾″	Jodhpur-Bikaner	84	...	...	...	...
7	(d) & (e)	5′ 6″	Nilgiri and Shoranur-Cochin	22	...	...	12	6 Winter's Block with starting semaphores. Does not give out a token or tablet. 6 Theobald's Train Key.
8	(g) to (l)	5′ 6″	Rajputana-Malwa	277	61	42 Sydney Jones' system 19 Experimental	20	17 Tyer's Tablet. 3 Experimental.
20	(a) & (b)	5′ 6″	Rohilkund and Kumaon	47	1	Experimental	...	...
21	...	5′ 6″	South Indian	229	23	16 List and Morse's 6 Dutton's 1 Experimental	22	Wintar's Ticket issuing.
22	...	5′ 6″	Southern Mahratta	230	...	...	106	100 Winter's. Does not give out a token or tablet. 4 Theobald's Train Key. 2 Experimental.
23	...	5′ 6″	Udaipur-Chitor	7	...	...	...	...
25	...	2′ 6″	Barsi Light	4	...	...	...	...
26	...	2′ 6″	Bukhtiarpore-Behar Light	7	...	...	...	...
4	(d)	2′ 6″	Cooch Behar	9	...	...	...	...
3	(m) & (n)	2′ 6″	Gaekwar's Dabhoi and Rajpipla	29	1	Country made	...	...
2	(b) & (d)	2′ 6″	Jubbulpore-Gondia and Raipur-Dhamtari	31	...	...	...	...
10	(f) & (g)	2′ 6″	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	21	...	...	...	...
29	...	2′ 6″	Kalka-Simla	20	...	...	...	...
31	...	2′ 6″	Morvi	14	...	...	...	...
2	(c)	2′ 6″	Parlakimedi Light	6	...	...	...	...
20	(c)	2′ 6″	Powayan Light	8	...	...	...	...
33	...	2′ 6″	Tarakeshwar-Magra Light	17	...	...	...	...
34	...	2′ 6″	Tezpore-Balipara Light	8	...	...	...	...
36	...	2′ 0″	Darjeeling-Himalayan	10	...	...	...	...
6	(g)	2′ 0″	Gwalior Light	23	...	...	...	...
37	...	2′ 0″	Howrah-Amta Light	18	...	...	...	...
38	...	2′ 0″	Howrah-Sheakhala Light	11	...	...	...	...
39	...	2′ 0″	Jorhat	8	...	...	...	...
			Total	4,320	936	...	889	

APPENDIX 27.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1900 to 1904.

Number.	Ry. system, vide App. L.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.) Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
1	B. C.	1900	Bengal	162	...	...	...	...	9,585	6·35	3·00	...	...	...	48·62	40·92	1,106·46	182·55	
		1901		162	...	...	...	...	8,710	6·20	3·00	...	...	...	52·05	41·75	1,283·43	172·62	
		1902		162	...	...	...	...	8,466	6·27	3·00	...	...	...	51·47	41·24	1,268·09	201·02	
		1903		162	...	...	...	...	10,623	6·00	3·00	...	...	...	51·10	41·10	1,278·70	256·13	
		1904		162	...	...	...	...	9,789	5·67	3·00	...	...	...	51·24	40·35	1,113·51	186·82	
2 (a)	B. N.	1900	Bengal and Umaria	242	...	...	...	...	101,215	5·99	2·99	...	...	...	68·30	61·62	503·83	164·41	
		1901		331	...	...	...	...	95,231	6·26	2·50	...	...	...	57·99	51·92	826·90	178·95	
		1902		321	...	...	...	...	113,180	4·29	2·48	103	5·60	5·60	58·84	53·37	759·43	178·58	
		1903		283	...	...	...	...	134,066	3·71	2·43	206	4·20	...	65·95	57 33	775·46	199·42	
		1904		228	...	...	...	...	143,725	5·52	2·58	219	...	...	67·95	58·65	754·68	200·80	
2 (c)	P.L. L..	1900	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		603	...	...	...	...	350	7·96	2·37	...	...	...	41·56	39·06	...	...	
		1903		567	...	...	...	...	362	7·40	2·12	...	...	...	44·48	42·06	5,545·54	664·51	
		1904		495	...	...	...	...	361	8·70	2·46	...	...	...	44·19	42 38	3,373·00	627·00	
(d)	E. D.	1900	Bengal	482	...	...	...	...	369	8·12	2·44	...	...	...	...	...	...	...	
		1901		481	...	...	...	...	599	8·06	2·38	...	...	...	23·70	22·11	1,282·31	367·28	
		1902		480	...	...	...	...	554	6·41	2·37	...	...	...	23·31	22·75	1,266·15	378·98	
		1903		463	...	...	...	...	633	6·07	2·13	...	...	...	26·61	26·35	1,486·37	437·75	
		1904		442	...	...	...	...	785	8·12	2·46	...	...	...	29·43	29·08	1,168·36	403·60	
2 (b)	J. G. E.	1900	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1903		603	...	...	...	...	191	7·68	2·12	...	...	...	64·35	60·52	1,135·88	396·30	
		1904		617	...	...	...	...	3,165	10·31	2·46	...	...	...	56·20	47·63	1,178·53	344·98	
3 (a) to (f)	B., B.& C.I	1900	England, Bengal and Singareni.	164	...	16,136	22·73	...	74,587	15·84	...	2,175	3·88	...	58·35	50·17	510·34	146·31	
		1901		138	...	5	27·00	...	77,916	16·13	...	2,049	3·80	...	60·26	51·16	524·84	155·57	
		1902		126	...	7,477	20·00	...	65,559	15·98	...	2,063	3·27	...	58·11	48·99	543·66	154·30	
		1903		121	...	10,884	19·38	...	63,172	14·56	...	2,226	3·00	...	57·58	48·16	514·46	148·09	
		1904		129	...	13,545	19·62	...	67,666	12·92	...	2,344	3·00	...	59·27	49·22	536·53	152·36	
3 (m) & (i)	G.D. & R.	1900	England and Bengal.	...	...	145	...	...	1,045	...	...	59	...	...	24·25	24·14	...	...	
		1901		...	...	...	...	...	1,245	...	...	54	...	...	25·65	25·48	...	...	
		1902		...	...	...	...	...	1,089	...	...	21	...	...	24·18	24·02	...	...	
		1903		...	...	...	...	...	1,417	...	...	70	...	...	25·50	25·17	...	...	
		1904		...	...	...	...	...	1,246	...	...	83	...	...	25·39	25·12	...	...	
4 (a)	E.B S.	1900	Bengal	177	...	...	...	...	62,485	5·69	2·90	...	...	...	68·39	48·47	881·82	201·99	
		1901		186	...	...	...	...	65,477	5·93	2·80	...	...	...	71·66	51·09	1,008·11	226·09	
		1902		167	...	...	...	...	67,891	6·10	3·48	...	...	...	69·86	49·57	889·42	209·53	
		1903		156	...	...	...	...	69,296	5·65	2·61	...	...	...	72·02	50·20	919·95	212·73	
		1904		182	...	...	...	...	69,974	5·02	2·39	...	...	...	72·78	49·11	863·33	206·85	
4 (b) and (c)	E. B. S.	1900	Bengal and Assam.	287	...	...	...	...	35,904	8·20	3·59	...	...	...	38·32	30·77	783·05	215·42	
		1901		303	...	...	...	...	40,271	8·71	3·69	...	...	...	39·75	32·18	920·93	229·57	
		1902		291	...	...	...	...	42,838	9·82	5·14	...	...	...	42·62	34·31	898·88	235·43	
		1903		280	...	...	...	...	47,247	6·52	3·78	...	...	...	44·07	35·65	844·88	229·44	
		1904		285	...	...	...	...	49,391	6·09	3·75	...	...	...	45·84	36·77	872·27	231·02	
(d)	C.B.	1900	Bengal and Assam.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		407	...	...	...	...	785	10·69	4·18	...	...	...	29·95	19·13	...	...	
		1903		85	...	...	...	...	980	9·86	9·04	...	...	...	28·76	21·10	...	...	
		1904		72	...	...	...	...	1,271	9·45	9·40	...	...	...	26 36	20 57	...	...	
...	E.C.	1900 1901	Bengal and Singareni.	249 Transferred partly to the Bengal-Nagpur and partly to the Madras railways.	...	...	...	...	53,479	7·47	...	...	...	...	60·38	56·00	689·85	178·13	
5	E.I.	1900	Bengal and Umaria.	255	...	...	...	...	461,061	4·19	2·03	...	...	...	63·80	51·61	491·90	173·42	
		1901		245	...	...	...	...	474,934	4·00	1·91	...	...	...	63·05	50·47	470·61	164·71	
		1902		260	...	...	...	...	483,247	4·18	1·96	...	...	...	63·92	50·76	503·10	161·42	
		1903		256	...	...	...	...	476,581	4·19	2·02	...	...	...	65·75	51·97	457·12	151·16	
		1904		244	...	...	...	...	468,271	4·05	1·97	...	...	...	66·47	51·66	406·33	137·59	

APPENDIX 27—*contd.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1900 to 1904—contd.

Number.	By system, *vide* App. I.	Calendar year.	Sources of supply. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	Wood.	Description of fuel with actual quantity consumed and cost per ton. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.) Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
6 (a) to (f)	G. I. P.	1900 1901 1902 1903 1904	Bengal, Singareni, Umaria, Neebuda and Warora.	371 318 294 327 304	... ...	... ... 303 ... 202	... ...	... ... 12·87 ... 18·54	376,245 381,380 425,936 456,794 463,917	7·86 8·57 8·38 8·47 8·39	5·24 6·18 5·98 6·07 6·45	3,883 4,349 4,515 4,439 5,117	... ...	3·05 2·62 3·81 3·91 3·58	68·79 66·60 66·79 68·43 68·91	59·91 57·86 58·11 59·65 60·50	819·32 764·21 719·69 798·03 776·00	209·94 198·21 193·63 206·32 205·09	
6 (g)	G. L.	1900 1901 1902 1903 1904	Bengal and Mohpani.	... ... 750 535	... ...	... ...	... ...	... ...	962 886 1,400 1,617 1,990	... ... 16·00 13·28	... ... 2·75 3·25	47 16 ... 14 24	... ...	... ...	29·06 37·71 35·03 38·30 36·13	... 35·99 35·03 36·00 34·10	... ...	... ...	
7 (a) to (c)	M.	1900 1901 1902 1903 1904	England, Bengal and Singareni.	294 434 313 333 191	17 15 14 27 38	229 125 4	32·90 32·90 ... ... 31·32	12·50 12·50 ... ... 28·49	44,900 94,484 97,546 112,647 130,755	12·67 13·52 10·32 10·29 10·82	4·75 4·04 5·25 5·12 8·95	87,615 94,503 108,529 96,577 59,148	4·95 5·74 4·97 4·37 4·81	4·60 5·42 4·68 4·42 4·01	63·90 63·66 68·64 73·02 70·78	52·81 54·19 57·65 60·89 58·69	997·90 892·19 974·52 1,069·81 946·28	226·56 212·76 227·03 240·40 224·48	
7 (d) & (e)	S. C. & N.	1900 1901 1902 1903 1904	England, Bengal and Singareni.	328 328 241 688 148	... ... 16 18 21	1,229 1,510 1,875 1,662 2,430	38·03 38·03 31·67 29·00 25·35	12·50 12·50 *27·57 *29·17 *22·54	8 5 ... 11 133	16·79 18·45 ... 13·60 14·34	4·75 4·04 ... 5·12 8·95	300 385 3,315 5,889 5,116	3·87 4·00 4·43 4·61 4·48	... ... 4·09 4·25 4·04	79·14 88·52 72·38 61·42 61·30	75·52 85·85 66·69 54·08 54·18	... 1,410·33 4,399·75 2,409·43 2605·63	... 1,302·99 654·46 369·85 423·49	* Including sea freight from England.
9 (a) & (b)	N. G. S.	1900 1901 1902 1903 1904	Singareni	101 102 103 132 132	... ...	... ...	... ...	... ...	36,625 29,307 30,215 26,967 26,276	... ... 6·27 6·27	4·36 4·60 4·66 4·50 4·50	... ... 250 203	... ... 5·38 5·83	... ... 3·25 4·14	69·96 63·54 67·00 61·02 61·08	60·39 54·15 56·75 51·91 50·87	541·65 587·37 567·37 547·72 523·22	172·91 174·91 173·81 160·95 158·79	
9 (c)	H. G. V.	1900 1901 1902 1903 1904	Singareni	493 321 341 347 347	... ...	... ...	... ...	... ...	8,969 13,851 14,442 14,610 14,309	10·77 7·19 6·98 10·00 9·82	4·50 4·50 4·86 6·62 5·56	... ... 265 205	... ... 4·60 10·52	... ... 5·56	44·00 41·08 40·12 39·66 40·86	40·39 37·73 36·11 35·55 36·85	1,197·34 1,189·82 1,026·21 1,031·64 986·72	264·49 231·26 219·62 217·01 205·73	
10 (a) to (e)	N. W.	1900 1901 1902 1903 1904	England, Bengal, Dandot, Bhagnawals and Khost.	‡838 ‡838 ‡838 ‡838 ‡838	... ...	24,035 11,074 7,206 3,736 650††	... ... ††	26·60 22·27 20·61 19·00 ††	158,458 194,134 248,279 258,111 370,454	†17·25 †16·81 § ¶ ‡‡	7·44 5·38 ‖ ** §§	123,828 180,521 122,323 216,097 163,151	5·36 5·21 ... 5·31 5·35	... ...	53·25 51·24 52·84 52·72 57·16	46·59 44·95 46·36 46·47 50·12	680·47 520·93 593·84 557·78 481·27	171·20 149·71 160·45 155·74 156·96	† Includes Nowshera-Dargai railway during the first-half of 1901. ‡ Of Bengal coal only. § Bengal coal *vid* Kimari Rs. 13·62 and *vid* Ghaziabad Rs. 15·44. ‖ Bengal coal from Rs. 2·37 to Rs. 3·00 and Khost and Dandot coal between Rs. 7 and Rs. 13 and Khost patent fuel at Rs. 20. ¶ Bengal coal *vid* Kimari Rs. 12·00 and *vid* Ghaziabad Rs. 14·88 ** Bengal coal from Rs. 2·06 to Rs. 3·50 and Khost and Dandot coal between Rs. 7 and Rs. 13. †† There was no importation of foreign coal during 1904.
10 (f) & (g)	K. T. & N. D. ‖‖	1900 1901 1902 1903 1904	Bengal and Dandot.	... ...	... ...	... ...	... ...	... ...	... 407 1,235 2,788 2,731	... ... ‡‡	... ... §§	... 97 160 192 270	... ... 5·35	... ...	... 27·25 26·75 25·16 21·34	... 21·71 22·32 21·45 17·83	... 1,824·83 2,072·38 2,362·43 1,852·21	... 310·27 318·41 495·46 335·28	‡‡ Bengal coal *vid* Kimari Rs. 11·08 and *vid* Ghaziabad Rs. 14·63. §§ Bengal coal from Rs. 1·94 to Rs. 3·25, Chita-Dand coal Rs. 11·22 and Khost and Dandot coal between Rs. 6·92 and Rs. 13.
11 (a) & (b)	O & E.	1900 1901 1902 1903 1904	Bengal	528 528 674 595 603	... ...	... ...	... ...	... ...	76,503 92,868 98,775 103,040 119,278	10·18 10·39 9·38 7·76 7·46	3·18 2·97 2·53 2·15 2·13	... ...	... ...	... ...	49·88 51·04 51·68 54·81 55·39	42·05 43·60 44·36 46·99 47 68	811·20 784·95 819·01 849·59 791·59	177·86 172·47 172·21 177·85 179·43	
12	A. B.	1900 1901 1902 1903 1904	Bengal and Assam.	86 106 105 120 120	... ...	... ...	... ...	... ...	9,780 10,781 13,661 15,682 22,837	9·47 10·22 9 25 7·92 7·64	... ...	... 1,627 2,715 1,918 ...	... 1·72 1·57 1·45 ...	... ...	36·57 39·09 43·52 43·06 43·89	31·43 32·95 37·21 36·78 36·02	636·60 734·11 1,011·99 903·35 913·92	163·97 184·88 223·73 245·24 235·17	
13	B. & N. W.	1900 1901 1902 1903 1904		301 228 252 250 248	83 27 25 25 18	... ...	... ...	... ...	48,644 58,173 71,240 87,652 97,633	6·30 5·99 6 11 5·61 5·51	3·34 3·19 3·04 2·78 2·41	10,548 3,823 2,766 4,733 1,147	3·81 3·95 4·22 4·28 ...	3·81 3·95 4·22 4·28 4·65	38·61 39·33 38 09 49·95 52·62	32·17 33·67 33 16 41·73 43·32	770·20 713·59 821·31 825·63 830·73	208·64 203·14 210 21 225·02 228·20	‖‖ The figures against 1901 are for second-half only, those for the first-half are included with the North Western State railway.

APPENDIX 27—*contd.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1900 to 1904—contd.

Number.	Ry. system, *vide* App. I.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	SOURCES OF SUPPLY. Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	SOURCES OF SUPPLY. Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Foreign coal. Cost per ton. Including freight.	Foreign coal. Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Indian coal. Cost per ton. Including freight.	Indian coal. Cost per ton. Excluding freight.	Wood. Quantity in tons.	Wood. Cost per ton. Including freight.	Wood. Cost per ton. Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.) Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs	Rs.		Rs.	Rs.					
14	B. D.	1900	Bengal	*	...	...	...	...	1,333	13·11	...	...	...	...	53·65	37 01	...	...	*Prices are given at the place of delivery which is the place of storage.
		1901				...	...	...	2,789	15·84	...	...	...	...	49·97	41·10	...	...	
		1902				...	...	...	2,496	12·33	2·75	...	...	...	40·16	33 92	...	...	
		1903				...	...	...	3,023	11·22	...	...	...	...	31·35	29·83	...	...	
		1904				...	...	...	3,474	10·60	...	...	...	...	30·14	28·05	...	...	
15	B. G. J. P.	1900	Eng-land, and Palana.	59	...	1,735	...	...	7,647	17·87	...	98	4·50	..	30·78	28·24	843·17	184·84	
		1901		61	...	254	...	...	6,940	18·69	...	79	10 87	...	31·19	28·57	737·67	183 69	
		1902		52	...	1,494	23·23	...	4,966	18·00	...	74	8 88	...	29·77	27 45	913·30	174·64	
		1903		54	...	313	23·24	...	6,027	15·44	...	80	7 73	...	30·26	27·32	800 61	170·38	
		1904		53	...	2	23·23	...	7,531	14·13	...	86	7·50	...	31·20	28·37	774 69	173·11	
16	B.	1900	Eng-land, Bengal and Burma.	128	...	...	...	...	58,020	15·62	...	44,826	3·70	...	49·80	41·12	959·88	273·70	
		1901		131	...	...	...	...	70,376	14·88	...	43,302	3·53	...	54·67	44·74	1,013·12	289·08	
		1902		120	...	3,114	26·75	...	62.124	12·57	...	55,474	3·95	...	52·32	42·54	972 47	255 40	
		1903		109	...	968	21·36	...	72,740	10·63	...	66,406	3·81	...	51·96	42 70	1,057·55	258·16	
		1904		128	...	599	21·22	...	78,854	10·47	...	52,977	4·54	...	49 98	41·42	981·89	240 27	
17	D.	1900	Bengal	118	...	...	...	...	328	5·00	...	...	...	...	48 00	48·00	...	734·00	
		1901		118	...	...	...	...	382	5·31	...	...	...	...	56·41	56·41	...	...	
		1902		...	...	...	...	...	400	5·62	3·00	...	...	...	61·37	61 37	...	...	
		1903		...	...	...	...	...	393	4·06	...	...	...	...	56·55	56·55	...	...	
		1904		...	...	...	...	...	501	5·50	2·25	...	...	...	71·30	...	...	...	
18	D. S.	1900	Assam	*	...	...	...	...	4,453	8·50	...	41	2·05	...	44·19	28 34	...	...	
		1901				...	...	...	4,834	8·50	...	21	2·36	...	45·54	30·08	...	...	
		1902				...	...	...	4,616	8·50	8·50	26	2·08	1·23	51·64	36·75	...	...	
		1903				...	...	...	3,983	8 50	8·50	12	2·56	2·00	43·67	29·46	...	...	
		1904				...	...	...	4,838	8 50	8·50	10	1·71	1·71	51·88	33·39	...	...	
19	J. B.	1900	Bengal and Palana.	913	...	...	...	...	10,393	18·87	4·48	...	...	...	37·07	35·34	644·16	203·21	
		1901		665	...	...	...	...	13,551	...	4·47	2,791	...	4·62	42·38	40·20	928 57	240·94	
		1902		467	...	...	...	...	19231	11·59	5·55	4,981	...	4·34	47·63	45·42	1,060·85	261 76	
		1903		358	...	...	...	...	22,420	11·98	7·36	120	4·38	...	52·50	49·61	1,018·95	267 31	
		1904		344	...	...	...	...	27,832	10·84	6·13	152	3·62	3·62	59·31	55·34	1,137·75	297·67	
3 (g) to (i)	R. M.	1900	Eng-land, Bengal and Singa-reni.	719	...	11,703	26·43	20·30	112,653	18 20	9·41	2,121	5·00	...	37 76	33·60	411·32	135·49	
		1901		720	...	260	...	...	118,778	18·23	6·84	2,900	5·00	...	39·17	34·49	415·75	136·57	
		1902		722	...	...	...	...	113,360	16·57	5·74	2,183	5·00	5·00	39·84	34·62	447·79	164·30	
		1903		725	...	...	...	...	95,725	15·79	6·03	2,615	5·00	5·00	37·60	31·93	474·48	161·48	
		1904		792	...	...	...	...	109,754	14 39	4·20	2,481	5·00	5 00	38·08	32 62	496·38	169·95	
20 (a) & (b)	B. K.	1900	Bengal	669	...	...	...	...	293	16·32	6·13	15,629	3·03	...	25·29	20·61	575·75	153·62	
		1901		677	...	...	...	...	1,106	14 65	3·54	16,302	3·24	...	28·26	22 93	614·42	172·87	
		1902		677	...	...	...	...	2,068	13 52	2·56	17,503	...	3 18	32·00	25 98	631 90	188·36	
		1903		677	...	...	...	...	1,792	11 46	2·37	17,105	...	3·27	30·91	25·25	613 37	178·58	
		1904		606	...	...	...	...	1,719	13·63	3·00	10,673	...	3·47	32·25	26·28	632·13	183·90	
20 (c)	P. W. L.	1900	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	1,440	...	3·05	21·03	19·91	...	...	
		1903		...	...	...	...	...	...	...	...	1,226	...	3·26	19·03	17·81	...	...	
		1904		...	...	...	...	...	...	...	...	1,400	...	...	21·31	19·96	...	...	
21	S. I.	1900	Bengal and Singa-reni.	57	...	...	...	...	51,082	13·13	...	1,858	4·54	...	35·68	32·04	1,003·16	218·69	
		1901		60	...	...	...	...	55,120	13·25	...	1,343	4·50	...	34·59	31·66	823·48	201·19	
		1902		63	...	...	...	...	3,273	13·11	...	10,732	5·91	...	36·44	33·19	822·47	209 97	
		1903		82	...	...	...	...	60,096	12·18	...	10,516	4·91	...	37·71	34 23	774·08	205·48	
		1904		83	...	...	...	...	68,680	11·40	...	11,295	4·99	...	38·21	34·79	849·61	213·52	
22 (e) to (g)	S. M.	1900	England and Singa-reni and Bengal.	468	68	...	...	...	45,107	13·46	5·00	43,523	5·23	4·08	40·09	35·77	754·50	218·32	
		1901		461	92	...	...	...	35,582	13·38	5·00	49,568	5·70	4·08	38·41	37·01	818·19	217·36	
		1902		402	96	...	...	...	38,506	13·67	5·25	62,422	5 64	4·08	39·11	34·71	804 00	215·09	
		1903		351	74	133	18·88	18·88	38,492	14·25	8·40	65,629	5·44	4·19	40·71	36·27	893·88	219·75	
		1904		316	72	...	...	...	40,327	13 99	8·30	69,209	5·82	4·03	37·79	33·28	710·39	201·92	

APPENDIX 27—*concld.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1900 to 1904—concld.

Number.	Ry. system, *vide* App. I.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.	Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.) Per train mile.	Per Engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
22 (*h*)	W. I. P.	1900	England.	*	...	14	...	...	...	...	...	4,239	...	...	45·58	44·32	...	301·71	* Prices are given at the place of delivery which is the place of storage.
		1901				18	19·00	...	...	...	...	4,698	4·62	4·50	46 42	45·43	1,160·33	296·80	
		1902				Included		with	the South	ern	Mahratta	Railway.							
		1903				...	...	...	...	...	...	...	...	...	...	...	...	...	
		1904				...	...	...	...	...	...	...	...	...	...	...	...	...	
23	U. C.	1900	Bengal, Warora & Mohpani.	1,032	...	...	...	...	1,202	25·44	4·50	3	7·42	...	40·95	37·46	798·71	190·20	
		1901		826	...	...	...	...	862	25·30	4·25	3	9·30	...	37·49	34·79	881·31	180·15	
		1902		875	...	...	...	...	893	18·23	4·62	3	4·36	...	38·50	36·02	942·41	192·23	
		1903		977	...	...	...	...	863	18·71	3·65	4	7·00	7·00	37·37	35·02	1,438·32	207·76	
		1904		1,087	...	...	...	...	701	19·00	2·25	...	...	...	30·32	28·51	1,551·44	185 59	
25	B. L.	1900	Singareni.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	677	4·19	4·19	34·26	33·74	...	...	
		1902		...	...	...	...	...	...	...	...	655	5·00	...	31·90	31·14	...	...	
		1903		441	...	...	...	...	77	14·50	5 50	566	4·97	4·97	40·75	39·32	1,733·86	664·00	
		1904		...	...	...	...	...	...	...	...	790	6·19	6·19	94·69	92·82	...	...	
29	K. S.	1900	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1903		1,021	...	...	...	...	288	20·00	2·25	...	...	...	46·43	35·75	...	...	
		1904		1,018	...	...	...	...	5,166	21·00	2·25	144	12·19	...	69·48	59·97	7,964·93	1,135·20	
31	M. R. W.	1900	England and Bengal.	386	...	1,373	27·74	20·00	1,286	28·10	19·00	37	7·49	...	26·65	25·83	...	...	
		1901		386	...	2	34·80	26 80	2,125	25·67	17·00	22	13·06	...	28·69	27·99	...	...	
		1902		†386	...	...	...	...	1,622	23·74	15·74	21	7·50	7·50	24·25	23·68	...	...	
		1903		29	...	...	...	...	1,541	21·20	12·35	30	10·66	10·66	24·27	23·32	...	...	
		1904		†386	...	...	...	...	1,777	17·51	11·04	53	8·27	8·27	24·26	23·06	...	...	† This distance is by rail; the distance by sea is 637 miles.
33	B. P.	1900	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	963	6·25	3·30	...	...	...	25·23	23·72	...	...	
		1902		126	...	...	...	...	979	5·39	2·75	...	...	...	25·20	23·92	...	...	
		1903		157	...	...	...	...	960	5·36	2·92	...	...	...	25·27	24·10	...	...	
		1904		157	...	...	...	...	1,083	4·44	2·03	...	...	...	26·92	25·37	...	...	
34	T. B.	1900	Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	382	13·49	...	...	...	...	26·23	...	...	...	
		1902		...	...	...	...	...	398	13·50	...	...	...	...	26·76	...	...	...	
		1903		...	...	...	...	...	523	11·81	...	...	...	...	35·40	...	...	...	
		1904		...	...	...	...	...	580	13·50	...	...	...	...	38·52	...	...	...	
36	D. H.	1900	Bengal	404	...	...	...	...	3,385	...	3·12	...	...	...	40·24	40·24	...	...	
		1901		404	...	...	...	...	3,052	15·26	3·12	...	...	...	38·38	38·38	...	...	
		1902		...	...	...	...	...	3,422	15·30	3·12	...	...	...	40·81	40·81	...	...	
		1903		...	...	...	...	...	4,666	13 98	3·12	...	...	...	53·23	53·23	...	...	
		1904		...	...	...	...	...	4,697	10·09	2·50	...	...	...	41·22	40 88	...	...	
39	J.	1900	Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1901		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1903		9	...	...	...	...	773	13·76	13·62	...	...	...	33·15	...	...	...	
		1904		11	...	...	...	...	8·90	13 61	...	...	...	...	34·61	...	...	...	
	TOTAL	1900		...	...	56,589	...	...	1,858,051	...	...	340,330	...	...	...	...	...	...	
		1901		...	...	13,248	...	...	1,956,601	...	...	409,150	...	...	...	...	...	...	
		1902		...	...	21,469	...	...	2,091,992	...	...	402,442	...	...	...	...	...	...	
		1903		...	...	‡17,696	...	...	2,205,889 ‡	...	...	‡497,185	...	...	...	...	...	...	‡ Excluding the Bakhtiarpore-Behar, Bangchat-Krishnagar, Thaton-Duyinzaik, Howrah-Amta and Howrah-Shea k h a la Light, railways.
		1904		...	...	§17,432	...	...	2,447,341 §	...	...	395,297 §	...	...	...	...	...	...	§ Excluding the Bakhtiarpore-Behar, Thaton-Duyinzaik, Howrah-Amta and Howrah-Sheakhala Light, railways.

APPENDIX 28.

Coal mined in India during the calendar years 1885 to 1904.

Years.	Quantity mined in each Province.												Quantity of Indian coal consumed by railways in India.	Quantity of Indian coal exported by sea.		Quantity of Foreign coal imported into India.	
	Bengal.	Central Provinces.	Assam.	Central India.	Nizam's territory.	Punjab.	Kashmir.	Baluchistan.	Rajputana (Bikaner).	Madras.	Burma.	Total.		To Indian ports excluding Burma.	To ports outside India, including Burma.	From United Kingdom.	From other countries.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885.	1,123,700	119,116	43,767	7,698	...	...	...	...	...	...	...	1,294,231	486,716	Information is not available.	500	778,643	40,659
1886.	1,186,802	117,287	70,859	13,539	...	...	...	...	...	...	...	1,388,487	470,075		199	698,462	44,653
1887.	1,319,090	128,981	89,302	15,497	3,259	7,523	...	411	...	...	...	1,564,063	488,774		315	786,149	43,010
1888.	1,380,594	157,768	101,528	41,580	13,382	11,249	...	2,802	...	...	...	1,708,903	551,770		15,796	785,776	20,463
1889.	1,541,356	144,465	116,676	52,956	59,646	22,835	...	8,238	...	...	...	1,946,172	715,240		39,972	717,024	52,180
1890.	1,626,245	137,022	145,708	77,842	125,486	40,677	...	15,541	...	...	...	2,168,521	654,829		26,336	631,725	21,857
1891.	1,747,122	141,736	154,208	69,741	144,668	60,714	...	10,368	...	20	...	2,328,577	797,142		4,515	726,069	17,344
1892.	1,920,050	132,005	164,050	88,623	149,601	66,353	...	13,284	...	61	3,670	2,537,696	885,492		15,725	628,374	23,126
1893.	1,902,866	135,118	164,420	94,348	157,421	77,294	...	20,094	...	502	9,938	2,562,001	924,900		52,302	616,319	18,066
1894.	2,035,934	140,495	169,448	122,837	240,525	66,467	...	24,753	...	1,337	12,111	2,823,907	1,062,748	143,813	154,282	675,043	57,112
1895.	2,716,155	122,776	172,717	118,479	292,915	72,493	...	25,458	...	1,787	17,289	3,540,019	1,119,621	162,276	211,407	773,675	15,458
1896.	3,037,920	141,155	177,259	115,886	262,681	79,017	...	26,257	...	...	22,993	3,863,698	1,182,051	389,842	191,030	524,420	93,213
1897.	3,142,497	131,629	185,533	124,778	365,550	92,792	...	12,043	...	...	11,472	4,066,294	1,328,120	731,742	390,979	210,257	47,016
1898.	3,622,090	149,709	200,329	134,726	394,623	85,862	...	13,372	511	...	6,975	4,608,196	1,418,241	737,689	490,290	297,076	34,209
1899.	4,035,265	156,576	225,623	164,569	401,216	81,835	...	15,822	4,249	...	8,105	5,093,260	1,560,771	672,311	467,306	406,451	112,064
1900.	4,978,492	172,842	216,736	164,489	469,291	74,063	...	23,281	9,250	...	10,228	6,118,692	1,858,061	1,030,709	711,874	91,710	43,939
1901.	5,487,585	191,516	254,100	164,362	421,218	67,730	...	24,656	12,094	...	12,466	6,635,727	1,956,631	1,157,892	645,953	113,519	79,108
1902.	6,259,236	196,981	221,696	171,538	455,424	55,373	1,060	33,889	16,503	...	18,302	7,424,402	2,091,992	974,602	728,316	198,574	20,778
1903.	6,361,212	159,154	239,328	193,277	362,733	43,704	999	46,909	21,764	...	9,306	7,438,386	2,203,889	1,235,818	723,873	133,711	30,429
1904.	7,060,425	139,027	266,765	185,774	419,546	45,594	270	49,867	45,078	...	1,105	8,233,451	2,447,341	1,447,867	896,885	174,705	79,169

APPENDIX 29.

State Collieries worked by Railway Companies or by the State.

Particulars.	Kurhurbarree and Serampore.		Warora.		Dandot.		Khost.		Haranpur Pressed Fuel Factory.		Remarks.
	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	
Name of owner	East Indian railway.		State		North State	Western railway.	North State	Western railway.	Northern railway.	West-State railway.	
Capital outlay . . Rs.	19,11,613	21,80,572	14,68,525	14,15,597	1,90,094	1,94,753	3,37,171	3,25,462	83,284	85,002	*East Indian railway.*—Capital outlay is approximate and is made up of the purchase money, Rs. 3,05,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital expenditure incurred from 1st January 1880.
Output — Large coal. Tons	513,774	469,425	100,745	87,052	30,559	19,971	15,871	4,313	...	...	
Output — Small coal. Tons	24,166	33,736	26,878	25,267	2,374	674	1,425	455	...	...	
Output — Slack coal. Tons	62,151	82,303	...	...	10,758	10,358	19,149	33,806	...	...	
Output — Total. Tons	600,091	585,464	127,623	112,319	43,691	31,003	36,445	38,574	5,857	5,659	*Warora.*—The decrease in the capital outlay in 1904 was due to certain credits, owing to a write-back under stores, manufactures and other heads.
Quantity issued . Tons	587,327	597,208	127,623	112,319	43,691	31,003	36,445	38,574	5,857	5,659	
Gross earnings . Rs.	10,85,816	10,61,310	5,92,484	5,50,702	2,80,988	2,01,048	3,57,055	3,42,710	58,572	56,590	
Working expenses . Rs.	10,85,816	10,61,310	3,99,238	3,73,696	3,24,768	2,27,549	2,99,674	3,06,382	54,475	63,775	
Net earnings or loss Rs.	...	...	1,93,246	1,77,006	—43,780	—26,501	57,381	36,328	4,097	—7,185	
Percentage on capital .	...	...	13·16	12·50	...	...	17·02	11·16	4·92	...	
Average number of persons employed daily.	8,464	8,281	1,235	1,040	1,403	1,229	648	705	15	14	
Number of tons raised per person employed.	70	70	103	108	31	25	56	55	2	1	
Number of persons killed.	3	2	1	2	1	...	1	3	...	...	
Number of persons injured.	36	27	2	3	10	7	1	...	1	...	

APPENDIX 30.

Accidents and casualties to trains on railways treated as one System during the Calendar years 1903 and 1904.

Description.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890, *i. e.*, serious accidents.		Other accidents.		Total number of accidents.		Number of passengers and others. (Figures in italics were not passengers.) Killed.		Injured.		Number of servants. Killed.		Injured.		Total of all classes. Killed.		Injured.	
	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.
1. Collisions between passenger trains or parts of passenger trains	6	4	5	2	11	6	17	...	43	3	1	...	3	1	18	...	46	4
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	23	24	26	59	51	83	23 *1*	7	36	40	4	3	13	11	28	10	49	51
3. Collisions between goods trains or parts of goods trains	10	11	56	45	66	56	2	...	...	...	2	1	19	9	4	1	19	9
4. Collisions between light engines	4	4	22	38	26	42	...	...	...	...	1	...	3	4	1	...	3	4
5. Passenger trains or parts of passenger trains leaving the rails	76	82	75	47	151	129	1	...	8	1	...	...	...	...	1	...	8	1
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	3	9	216	377	219	386	...	1	...	...	1	7	...	8	1	8	...	
7. Trains or engines travelling in the wrong direction through points	17	11	114	118	131	129	*1*	...	9 *1*	11	...	2	9	10	1	2	19	21
8. Trains running into stations or sidings at too high a speed	3	4	19	24	22	28	...	...	...	...	...	2	6	1	...	2	6	1
9. Trains running over cattle on the line	18	17	2,865	3,248	2,883	3,265	*1*	...	2 *1*	*1*	3	2	11	15	4	2	14	16
10. Trains running over obstructions on the line	12	18	133	139	145	157	2	1 *1*	2	1 *7*	...	1	3	1	2	3	5	9
11. Trains running through gates at level-crossings	2	3	43	38	45	41	...	...	...	...	...	...	1	...	...	...	1	...
12. The bursting of boilers of engines	...	...	1	2	1	2	...	...	...	...	...	...	...	...	...	...	...	...
12. (*a*) The bursting of tubes, etc., of engines	3	...	260	307	263	307	...	...	...	...	...	...	5	...	...	...	5	...
13. The failure of machinery, springs, etc., of engines	4	4	774	936	778	940	...	...	1	...	...	...	...	2	...	...	1	2
14. The failure of tyres	...	...	10	13	10	13	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels	1	1	8	14	9	15	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	11	16	77	51	88	67	...	1	...	3	...	...	...	...	...	1	...	3
17. Ditto of brake apparatus	...	1	6	7	6	8	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	5	5	327	370	332	375	2	...	16	2	...	...	1	1	2	...	17	3
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	2	2	2	...	4	2	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	1	...	149	124	150	124	...	...	...	...	...	...	...	...	...	...	...	...
21. The flooding of portions of permanent-way	39	20	119	75	158	95	...	...	...	...	...	...	2	...	...	...	2	...
22. Slips in cuttings or embankments	6	21	27	39	33	60	...	1	...	14	...	2	1	...	...	3	1	14
23. Fire in trains	3	3	240	169	243	172	...	...	...	1	...	...	...	...	...	...	...	1
24. Fire at stations, or involving injury to bridges or viaducts	4	6	72	48	76	54	3 4	2	1 2	1	...	...	1	2	7	2	4	3
25. Other accidents	40	34	583	515	623	549	2 3	*3*	1	7 *6*	3	3	17	38	3	6	18	51
Total	298	300	6,231	6,805	6,524	7,105	50 *12*	11 *6*	116 *7*	83 *15*	15	23	9	103	77	40	218	201

APPEN

Numerical return of servants of all races employed on each railway system (open lines only) and

Number.		Railway system.	Number of servants employed.							
			Europeans.		Eurasians.		Natives.		Total.	
Main head.	Sub-head.		1903. Revised.	1904.	1903. Revised.	1904.	1903. Revised.	1904.	1903. Revised.	1904.
1	...	Bengal Central	11	13	12	11	1,538	1,680	1,561	1,704
2	...	Bengal-Nagpur	393	392	695	615	20,409	22,822	21,497	23,829
3	(*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India	229	233	256	268	15,041	15,212	15,526	15,713
4	...	Eastern Bengal State	306	304	422	430	22,015	22,691	22,743	23,425
5	...	East Indian	1,438	1,447	905	902	70,629	70,057	72,972	73,406
6	...	Great Indian Peninsula	1,001	1,047	957	983	54,253	60,193	56,211	62,223
7	...	Madras	254	278	1,501	1,586	22,103	23,353	23,858	25,217
9	...	Nizam's Guaranteed State	82	84	361	355	7,612	7,403	8,055	7,842
10	...	North Western State	831	870	701	662	53,912	57,418	55,434	58,950
11	...	Oudh and Rohilkhand State	275	283	286	293	18,478	20,419	19,039	20,995
12	...	Assam-Bengal	53	81	120	104	5,185	5,556	5,358	5,741
13	...	Bengal and North-Western	154	165	169	199	17,065	18,405	17,388	18,769
14	...	Bengal Dooars	6	5	4	6	885	874	895	885
15	...	Bhavnagar-Gondal-Junagad-Porbandar	12	11	29	26	2,516	2,663	2,557	2,700
16	...	Burma	182	207	597	634	13,209	13,388	13,988	14,229
17	...	Deoghur	...	...	1	1	62	60	63	61
18	...	Dibru-Sadiya	9	9	...	...	320	967	329	976
19	...	Jodhpur-Bikaner	13	14	4	4	3,244	3,310	3,261	3,328
8	(*g*) to (*l*)	Rajputana-Malwa	420	439	558	519	24,930	24,599	25,908	25,557
20	...	Rohilkund and Kumaon	24	23	16	17	2,964	3,150	3,004	3,190
21	...	South Indian	110	157	624	688	13,350	14,832	14,084	15,677
22	...	Southern Mahratta	179	186	426	438	13,841	14,186	14,446	14,810
23	...	Udaipur-Chitor	2	2	...	...	356	356	368	358
25	...	Barsi Light	1	1	2	3	188	189	191	193
26	...	Bukhtiarpore-Behar Light	1	1	...	...	102	102	103	103
29	...	Kalka-Simla	14	15	...	1	327	347	341	363
31	...	Morvi	1	1	2	2	492	490	495	493
33	...	Tarakeshwar-Magra Light	...	...	1	1	213	223	214	224
34	...	Tezpore-Balipara Light	2	2	2	2	178	180	182	184
36	...	Darjeeling-Himalayan	21	18	10	14	858	987	889	1,019
37	...	Howrah-Amta Light	3	4	1	1	318	359	322	364
38	...	Howrah-Sheakhala Light	...	...	...	...	96	90	96	90
39	...	Jorhat	1	1	...	...	205	247	206	248
		Total	6,018	6,293	8,662	8,765	387,404	406,808	402,084	421,866

DIX 31.

the amounts deposited by them in the Provident Fund at the close of the Calendar year 1904.

Amount deposited in Provident Fund.						Remarks.
Number of depositors.		Amount at credit on the 31st December 1904.				
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.	
		Rs.	Rs.	Rs.	Rs.	
...	355	...	79,726	48,761	1,28,487	
250	3,480	86,284	8,65,568	7,38,459	16,90,331	
...	2,853	...	18,43,424	15,36,000	33,79,424	Excludes the Provident Fund transactions of the Godhra-Ratlam-Nagda railway which are included with those of the Rajputana-Malwa railway.
147	4,339	24,421	11,32,707	9,96,899	21,54,027	
6,952	9,026	...	...	...	1,28,62,361	Amounts of voluntary and compulsory deposits and bonus given by railway are not available.
4	7,575	687	86,12,959	...	86,13,646	Amount of bonus given by railway is not available.
88	5,762	96,103	15,13,806	12,07,213	28,17,122	
...	1,243	...	4,84,800	4,14,259	8,99,059	
396	7,204	86,404	30,07,744	26,86,293	57,80,441	
111	2,887	26,876	7,76,077	6,47,039	14,49,992	
...	1,110	...	1,91,873	1,09,687	3,01,560	
8	2,127	8,165	7,11,386	6,62,716	13,82,267	
...	145	...	21,012	15,313	36,325	
143	474	37,166	1,76,895	1,28,735	3,42,796	
...	2,613	...	7,27,104	5,62,928	12,90,032	
...	...	...	...	...	...	
...	...	...	...	...	...	
35	338	5,924	71,431	63,687	1,41,042	
356	3,635	70,945	16,00,512	14,72,278	31,43,735	The Provident Fund transactions include those of the Godhra-Ratlam-Nagda railway.
1	443	115	1,37,611	1,20,265	2,57,991	
13	3,025	6,473	10,37,842	5,58,552	16,02,867	
...	3,478	...	11,15,141	5,46,894	16,62,035	
...	35	...	5,505	2,556	8,061	
...	...	...	...	...	...	
...	12	...	397	574	971	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	144	...	...	...	1,85,174	
...	82	...	7,792	3,905	11,697	
...	23	...	1,532	920	2,452	
8	27	1,276	5,424	2,966	9,666	
3,512	62,635	4,50,933	2,41,28,288	1,25,26,899	5,01,53,560	

APPENDIX 32.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1904.

Number.		Corps.	Enrolled strength.						Sergeant Instructors furnished by the Army.	Remarks.
			Efficients.			Non-efficients.	Total number of volunteers of all nationalities in corps, including servants on construction work.	Total number of European and Eurasian servants on open lines of railway.		
Main head.	Sub-head.		Officers.	Non-Commissioned officers.	Volunteers.					
2	...	Bengal-Nagpur	19	131	860	194	1,204	1,007	10	
3	(a), to (f) & (m) & (n).	Bombay, Baroda and Central India—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	19	89	461	2	571	501	5	
		Bombay, Baroda and Central India Railway Reserve	...	6	65	...	71		...	
4	...	Eastern Bengal State	22	94	583	13	712	734	4	
	...	East Indian	62	185	1,726	32	2,005	2,349	18	
6	(a)	Great Indian Peninsula—								
		First Battalion, Great Indian Peninsula Railway Volunteer Rifles	28	118	936	21	1,103	2,030	10	
6	(b) to (g).	Indian Midland—								
		Second Battalion, Great Indian Peninsula Railway Volunteer Rifles	13	55	350	17	435		3	
7	...	Madras	37	109	1,176	34	1,356	1,864	12	
9	...	Nizam's Guaranteed State—								
		Hyderabad Volunteer Rifles	9	31	218	...	258	439	3	
10	...	North Western State	43	127	1,061	14	1,245	1,532	12	
11	...	Oudh and Rohilkhand State—								
		Oudh and Rohilkhand Railway Volunteer Rifles	12	51	403	2	468	576	4	
		Oudh and Rohilkhand Railway Reservists	2	...	41	1	44		...	
		Oudh Light Horse	1	1	...	...	2		...	
12	...	Assam-Bengal	16	32	205	...	253	185	3	
13	...	Bengal and North-Western—								
		Bengal and North-Western Railway Volunteer Rifles	22	44	244	3	313	364	5	
		United Provinces Light Horse-Gorakhpur Squadron	2	6	26	2	36		1	
15	...	Bhavnagar-Gondal-Junagad-Porbandar—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company	2	5	27	...	34	37	1	
16	...	Burma	30	35	600	...	665	841	9	
3	(g) to (l).	Rajputana-Malwa—								
		Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles	32	86	606	3	727	958	10	
20	...	Rohilkund and Kumaon—								
		Bengal and North-Western Railway Volunteer Rifle Corps	...	2	28	1	31	40	...	
21	...	South Indian	10	71	293	196	570	845	8	
22	...	Southern Mahratta	19	109	552	2	682	624	7	
23	...	Udaipur-Chitor—								
		Bombay, Baroda and Central India Railway Volunteer Rifles	1	1	...	...	2	2	...	
30	...	Morvi—								
		First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company	...	...	3	...	3	3	...	
33	...	Tarakeshwar-Magra—								
		East Indian Railway Volunteer Rifles	...	...	1	...	1	1	...	
36	...	Darjeeling-Himalayan—								
		Northern Bengal Mounted Rifles, "A" and "B" Troops.	...	2	14	1	17	32	...	
		Total	401	1,390	10,479	538	12,808	14,964	125	

APPENDIX 33.

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods lost or damaged for the Calendar year 1904.

Number.		Railway system.	Subordinate officers.	Constables and men.	Portion of the total annual cost borne by the Railway.				Cost of force to the railway per mile open.	Compensation payments on account of claims for goods lost or damaged.	Remarks.
Main head.	Sub-head.				Supervision.	Constables and men.	Contingencies.	Total cost of force to the railway.			
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1	...	Bengal Central . . .	3	24	5,307	5,625	436	11,368	90·94	732	
2	...	Bengal-Nagpur . . .	12	719	14,638	36,385	3,139	54,362	27·34	6,888	
3	(a), (c) to (f) & (m) & (n).	Bombay, Baroda and Central India.	74	512	27,240	66,681	8,029	1,01,950	118·76	13,813	
4	...	Eastern Bengal State . .	81	741	640	49,155	58	49,853	47·20	1,79,500	
5	...	East Indian	63	1,872	52,739	1,23,097	45,277	2,21,113	100·68	96,630	
6	...	Great Indian Peninsula . .	34	1,516	58,100	1,35,057	17,970	2,11,127	72·08	90,674	
7	...	Madras	21	610	15,202	69,105	7,276	91,583	61·47	3,298	
9	...	Nizam's Guaranteed State .	3	391	17,256	45,140	2,620	65,016	87·17	742	
10	...	North Western State . .	...	1,367	...	1,29,690	1,815	1,31,505	33·38	87,291	
11	...	Oudh and Rohilkhand State .	11	573	5,327	41,266	2,895	49,488	39·52	16,973	
12	...	Assam-Bengal	8	202	3,582	15,914	1,170	20,666	26·66	9,466	
13	...	Bengal and North-Western .	20	556	6,829	45,359	2,971	55,159	39·24	5,231	
14	...	Bengal Docars	...	...	...	908	...	908	5·94	691	
15	...	Bhavnagar-Gondal-Junagad-Porbandar.	26	123	16,787	11,137	6,477	34,401	75·53	617	
16	...	Burma	93	414	20,431	67,737	23,475	1,11,643	82·56	12,505	
19	...	Jodhpur-Bikaner . . .	3	37	1,797	3,027	310	5,134	6·23	1,228	
3	(b) & (g) to (i).	Rajputana-Malwa . . .	129	655	34,665	81,899	10,115	1,26,679	61·60	18,128	
20	...	Rohilkund and Kumaon . .	11	145	1,295	11,817	1,820	14,932	51·32	1,687	
21	...	South Indian	...	240	43,485	14,994	...	58,479	43·21	3,904	
22	...	Southern Mahratta . . .	14	718	19,903	71,495	9,376	1,00,774	63·18	25,350	
25	...	Barsi Light	1	4	59	565	29	653	29·63	150	
29	...	Kalka-Simla	2	6	394	162	67	623	10·48	586	
31	...	Morvi	3	12	772	1,232	596	2,600	27·65	1,087	

APPENDIX 34.

Transactions of the Fine Funds for the Calendar year 1904.

Number.		Railway system.	Assets.				Disbursements.						Balance on 31st Decembar 1904.
Main head.	Sub-head.		Balance on 31st December 1903. (*Revised.*)	Fines and bonus forfeited during 1904.	Interest on balance.	Total.	Hospitals for sick employés.	Compassionate allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	Bengal Central .	5,005	726	169	5,900	...	100	...	...	15	115	5,785
2	...	Bengal-Nagpur .	17,412	15,296	813	33,521	...	...	335	2,690	6,522	9,547	23,974
3	(*a*) to (*f*) & (*m*) & (*n*).	Bombay, Baroda and Central India . .	12,540	2,293	400	15,233	749	1,086	845	880	786	4,346	10,887
4	...	Eastern Bengal State	8,491	11,476	243	20,210	...	345	3,089	5,536	4,179	13,149	7,061
5	...	East Indian . .	96,420	22,425	3,594	1,22,439	...	...	2,803	1,649	3,987	8,439	1,14,000
6	...	Great Indian Peninsula	8,328	23,046	728	32,102	8	1,025	1,383	4,084	19,866	26,366	5,736
7	...	Madras . . .	1,12,758	9,853	3,842	1,26,453	...	6,117	306	1,148	11,275	18,846	1,07,607
9	...	Nizam's Guaranteed State . . .	5,174	2,298	78	7,550	30	25	...	...	466	521	7,029
10	...	North Western State .	12,424	18,466	503	31,393	100	48	5,000	5,701	4,695	15,544	15,849
11	...	Oudh and Rohilkhand State	18,895	4,880	586	24,361	...	563	5,741	308	5,659	12,271	12,090
12	...	Assam-Bengal . .	11,401	3,881	...	15,282	...	285	...	2,891	343	3,519	11,763
13	...	Bengal and North-Western . . .	65,950	16,263	1,434	83,647	...	314	...	2,523	1,341	4,178	79,469
14	...	Bengal Dooars . .	2,037	575	60	2,672	...	...	...	1,772	...	1,772	900
15	...	Bhavnagar-Gondal-Junagad-Porbandar .	5,129	1,078	159	6,366	...	...	...	91	411	502	5,864
16	...	Burma .	7,572	18,784	...	26,356	...	...	2,954	6,550	5,688	15,192	11,164
19	...	Jodhpur-Bikaner .	3,748	2,384	...	6,132	...	...	...	461	44	505	5,627
3	(*g*) to (*l*).	Rajputana-Malwa .	63,630	14,032	1,946	79,608	379	945	3,154	3,232	9,483	16,193	63,415
20	...	Rohilkund and Kumaon	22,135	1,910	2,224	26,269	...	...	...	...	468	468	25,801
21	...	South Indian . .	1,46,853	8,355	4,390	1,59,598	...	969	142	574	2,004	3,689	1,55,909
22	...	Southern Mahratta .	415	3,998	18	4,431	100	...	1,215	1,257	197	3,469	962
23	...	Udaipur-Chitor . .	282	50	...	332	...	...	...	...	30	30	302
29	...	Kalka-Simla . .	...	255	...	255	...	...	...	...	...	...	255
31	...	Morvi . . .	999	611	...	1,610	...	123	...	...	2	125	1,485
33	...	Tarakeshwar-Magra .	...	38	...	38	...	38	...	...	...	38	...
34	...	Tezpore-Balipara .	105	16	...	121	...	...	121	...	...	121	...
36	...	Darjeeling-Himalayan	180	105	...	285	...	...	...	...	102	102	183
39	...	Jorhat	311	92	9	412	...	...	...	...	20	20	392

APPENDIX 35.

Railway and Railway Aided Schools at the close of the Calendar year 1904.

Number. Main head.	Number. Sub-head.	Railway system. *vide*—Appendix I.	Railway schools. Number of schools.	Attendance. Children. Number on the rolls.	Attendance. Children. Average daily attendance.	Attendance. Apprentices and workmen. Number on the rolls.	Attendance. Apprentices and workmen. Average daily attendance.	Annual contributions. By Government.	Annual contributions. By Railway. From Revenue.	Annual contributions. By Railway. From Fine Fund.	Annual contributions. By school fees.	Annual contributions. Total.	Annual expenditure.	Railway aided schools. Number of schools.	Average daily attendance. Children.	Average daily attendance. Apprentices and workmen.	Annual Railway grant. From Revenue.	Annual Railway grant. From Fine Fund.	Remarks.
								Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.	
2	...	B. N. European	5	205	169	...	...	2,084	3,300	50	3,357	8,791	8,595	4	110	...	900	...	
		B. N. Native	3	1,089	175	...	...	971	849	285	651	2,756	2,242	...	...	...	...	...	
3	(a) to (f) & (m) & (s).	B. B. & C. I. European	3	101	80	24	21	1,252	3,589	485	1,985	7,311	7,396	19	50	...	3,181	...	
		B. B. & C. I. Native	1	17	15	...	...	...	...	360	188	548	488	...	...	...	...	...	
4	...	E B.S. European	...	...	...	...	...	...	...	...	...	...	...	5	116	11	2,391	2,391	
		E B.S. Native	5	95	71	268	77	...	1,266	...	...	1,266	1,266	13	477	...	698	698	
5	...	E.I European	18	813	736	55	46	14,428	16,145	...	80,071	1,10,644	1,20,771	3	100	...	1,952	...	
		E.I Native	67	3,026	2,169	2,488	1,005	3,138	2,880	2,803	19,949	28,770	29,283	...	...	...	...	...	
6	(a)	G. I. P. European	5	246	188	...	...	2,769	12,125	600	2,396	17,890	17,890	6	78	...	3,110	40	
		G. I. P. Native	...	...	...	...	...	...	...	...	...	...	...	11	416	...	1,963	...	
6	(b) to (f)	I. M. European	2	104	67	...	...	...	4,745	743	1,040	6,528	6,528	...	...	...	...	...	
		I. M. Native	...	...	...	...	...	...	...	...	...	...	...	2	71	...	422	...	
7	...	M. European	8	396	311	...	...	5,615	11 709	306	3,845	21,475	22,353	7	99	...	1,572	...	
9	(a) & (b).	N. G. S. European	1	48	41	...	...	...	1,604	...	363	1,967	1,156	3	136	...	510	...	
		N. G. S. Native	1	38	30	14	8	...	996	...	60	1,056	861	5	357	...	540	...	
10	...	N. W. European	2	70	49	42	40	2,094	1,945	335	756	5,130	5,130	16	423	...	13,606	2,337	In addition to these grants from the Fine Fund, the North Western State railway also contributed Rs. 1,738 for the "Oakgrove School" at Mussoorie and Rs. 39 to the Cathedral Orphanage, Lahore.
		N. W. Native	24	196	88	1,671	409	...	6,107	88	295	6,490	5,167	4	235	2	2,760	463	
11	...	O. & R. European	5	56	45	38	35	914	1,188	2,052	1,025	5,179	4,154	15	70	...	5,070	2,768	
		O. & R. Native	3	5	5	225	80	...	376	88	...	464	464	3	126	...	...	883	
12	...	A. B. European	1	17	14	...	...	294	1,200	...	156	1,650	1,276	...	...	...	...	...	
13	...	B. &N. W. European	2	69	63	...	...	1,275	1,800	...	843	3,918	3,513	...	...	...	...	...	
		B. &N. W. Native	...	...	...	...	...	...	...	...	...	...	...	2	62	...	324	...	
14	...	B. D. Native	...	...	...	...	...	...	...	...	...	...	...	1	11	...	70	...	
15	...	B. G.J. P. European	1	10	9	...	...	...	996	...	204	1,200	1,346	...	...	...	...	...	
		B. G.J. P. Native	2	91	64	...	...	...	434	...	169	603	597	...	...	...	...	...	
16	...	B. European	3	54	41	21	14	1,752	83	684	1,112	3,631	3,634	12	31	...	289	289	
		B. Native	3	192	160	30	23	1,804	489	1,618	3,608	7,519	5,993	15	47	...	363	363	
18	...	D. S. European	1	121	94	...	...	...	300	...	926	1,226	1,875	...	...	...	...	...	
9	(c)	H. G. V. European	1	16	8	...	...	...	420	...	71	491	378	...	...	...	...	...	
		H. G. V. Native	...	...	...	...	...	...	...	...	...	...	...	1	35	...	140	...	
3	(g) to (l)	B. M. European	9	357	167	96	85	2,856	5,484	2,255	3,984	14,579	13,900	1	69	...	180	...	
		B. M. Native	2	...	...	71	66	...	270	160	...	430	430	4	357	...	912	739	
21	...	S. I. European	4	119	111	...	...	1,014	4,378	142	785	6,319	4,503	...	...	...	...	...	
		S. I. Native	1	48	45	...	...	30	385	...	179	594	391	...	...	...	...	...	
22	...	S. M. European	8	230	185	...	...	911	5,415	30	1,836	8,192	7,999	7	80	...	...	1,080	
		S. M. Native	6	38	25	88	33	54	697	...	103	854	781	1	260	...	...	105	
24	...	T. B. Native	1	...	...	40	24	...	7	121	...	128	128	...	...	...	...	...	
6	(g)	G. L. Native	1	...	...	26	16	...	528	...	...	528	528	...	...	...	...	...	
		Total ...	199	7,777	5,225	5,197	1,982	43,255	91,710	13,205	1,29,957	2,78,127	3,81,016	160	3,816	13	40,955	12,106	

APPENDIX 38.

History of open lines of railways, and of lines under construction or sanctioned for commencement, on the 31st December 1904.

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APPENDIX 38.

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 1}}{\text{Sub-head (a)}}$. **BENGAL CENTRAL RAILWAY** (5'6" gauge)—

The line was worked for the Bengal Central Railway Company by the Eastern Bengal Guaranteed Railway Company from the 16th October 1882 to the 30th June 1884 and by the Eastern Bengal State Railway Administration until the 1st January 1897, on which latter date the Company took over the working.

	Open line.	Under construction.
	Miles.	Miles.
Mileage	127·69	*Nil.*

Running powers—

		Miles.
Home line over Foreign line :—		
Dum Dum Junction to Canal Junction, Eastern Bengal State railway	For passenger and goods trains	1·61
Canal Junction to Calcutta	" " " "	2·96
Canal Junction to Chitpore	For goods trains only	2·00
Calcutta to Kidderpore Docks	" " " "	7·31
		13·88

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
Main line—			Miles.	Miles.		Miles.	
Dum Dum Junction to Dattapukur	Mar. 1881	2-4-83	14·25		1882	20	
Dattapukur to Gobardanga		7-12-83	17·00		1883	52	
Gobardanga to Bongong		22-4-84	12·00				
Bongong to Khoolna		16-2-84	61·26		1884 to 1903	125	
Total main line	...	...	...	104·51			
Branch—							
Ranaghat to Bongong	Mar. 1881	16-10-82	20·50		1904	128	The Pattipukur extension was treated as a siding previously.
Pattipukur extension—							
Dum Dum Cantonment to Pattipukur	...	1-8-04	2·68				
Total branches	...	...	...	23·18			
Grand Total	...	...	...	127·69			

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 62 lbs. to the yard, originally laid on creosoted pine sleepers which have, however, been replaced mostly by sál sleepers. The rails are 30 feet long, with ten per cent. each of 27 and 24 feet rails, and there are 11 sleepers to a 30 feet rail, 10 to a 27 feet and 8 to a 24 feet rail.

Ballast.—The main line between Dum Dum Junction and Khoolna is brick ballasted, but not to the full section; the branch line from Ranaghat to Bongong is sand ballasted, with patches of brick ballast here and there.

Fencing.—The line is fenced throughout. The fencing consists of intermediate posts 10 feet apart from centre to centre supplemented by straining pillars and stiffening posts which are 1,000 and 500 feet apart respectively. There are 5 galvanized iron wires which are held tight by eyebolts passing through the straining pillars.

Curves.—The sharpest curve is of 1,700 feet radius, 3,050 feet long, at mile 47, near Bongong.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—26th July 1881.—Bengal Central Railway Company's principal contract with the Secretary of State.
5th January 1887.—Contract with the Secretary of State for the construction and working of the Bengal Central railway and for future extensions.

The general conditions of the contracts are as follows :—

Government aid.—Government guarantee interest at 3½ per cent. in sterling on the Company's share capital. Land was provided free of charge.

Currency of contracts.—The contracts may remain in force until the 31st December 1980. Government may, however, determine them on the 30th June 1905 or any succeeding 10th year on twelve months' notice, or on six months' notice at any time if the Company fails to observe its obligations, or the line is worked at a loss. On the determination of the contract by efflux of time or by notice, the Government are to pay the Company the amount of the par value of the share capital paid to Government.

Power of Company to surrender contracts.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), the net earnings, after providing for repayment to Government of interest (if any) on moneys that may be raised by debentures in excess of the original capital of £1,000,000, are divided in proportion of three-fourths to the Secretary of State and one-fourth to the Company; the proportion due to the Secretary of State being applied towards meeting the guaranteed interest.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—*contd.*

History of Railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 1}}{\text{Sub-head (a)}}$. **BENGAL CENTRAL RAILWAY** (5′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on Capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	TABLE I.							TABLE II.	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1881 . .	10,51,963	...	...	...	51,616	...	—51,616	...	...
1882 . .	46,38,355	...	...	...	1,85,534	...	—1,85,534	...	...
1883 . .	79,86,285	1,07,954	—39,390	...	3,17,449	...	—3,56,839	64	136·50
1884 . .	90,54,719	4,54,837	—1,19,682	...	3,62,189	...	—4,81,871	76	126·31
1885 . .	90,04,061	5,35,353	8,233	0·09	3,60,162	...	—3,51,929	82	98·46
1886 . .	89,65,705	5,67,343	—42,528	...	3,75,210	...	—4,17,738	87	102·70
1887 . .	91,09,422	6,48,494	—7,928	...	4,60,840	...	—4,68,768	100	101·22
1888 . .	92,53,170	7,12,901	1,58,145	1·71	5,19,942	...	—3,61,797	110	77·82
1889 . .	94,46,671	7,37,191	2,95,988	3·13	5,18,693	...	—2,22,705	113	59·85
1890 . .	96,88,212	6,67,804	2,45,907	2·54	4,39,962	58,992	—2,53,047	103	63·18
1891 . .	99,44,845	8,11,666	3,27,736	3·30	4,72,482	73,429	—2,18,175	125	59·62
1892 . .	1,00,65,784	7,69,347	3,12,903	3·11	5,30,251	74,600	—2,91,948	118	59·33
1893 . .	1,00,88,983	7,83,529	3,14,992	3·12	5,37,907	79,647	—3,01,562	121	59·80
1894 . .	1,01,41,094	8,20,179	2,41,182	2·37	6,11,415	...	—3,70,233	126	60·92
1895 . .	1,01,77,466	9,47,391	3,96,809	3·92	6,08,944	85,023	—2,95,158	146	57·90
1896 . .	1,06,38,927	9,33,266	3,44,465	3·20	5,69,175	91,306	—3,16,016	144	62·85
1897 . .	1,17,36,810	11,38,199	5,16,922	4·40	5,36,809	95,271	—1,15,158	175	56·98
1898 . .	1,23,58,300	10,24,657	3,68,008	2·98	5,19,231	1,20,642	—2,71,865	158	64·08
1899 . .	1,26,78,629	11,39,689	4,41,813	3·48	5,07,035	97,581	—1,62,803	158	61·23
1900 . .	1,26,96,415	13,33,419	5,50,699	4·34	5,04,985	1,24,611	—78,897	185	58·70
1901 . .	1,29,54,075	14,05,248	6,42,940	4·96	5,08,291	1,46,144	—11,495	194	54·25
1902 . .	1,31,11,415	13,17,214	5,73,918	4·38	5,11,298	1,53,667	—91,047	182	56·43
1903 . .	1,31,38,948	15,08,506	5,07,425	3·85	5,15,051	1,21,830	—1,29,456	209	66·36
1904 . .	1,31,52,982	15,59,668	5,39,679	4·10	5,15,679	1,30,367	—1,06,367	216	65·40

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (f)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM—**

Lines comprising system.—The Bengal-Nagpur railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(a)	Bengal-Nagpur railway (5′ 6″ gauge)	1,383·74	32·64	1,416·38
	East Coast State railway, Northern section (5′ 6″ gauge)	311·98	...	311·98
(b)	Jubbulpore-Goudia extension, Bengal-Nagpur railway (2′ 6″ gauge)	213·77	69·33	283·10
(c)	Parlakimedi Light railway (2′ 6″ gauge)	24·62	...	24·62
(d)	Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)	56·24	...	56·24
(e)	*Gondia-Chanda* (2′ 6″ gauge)	...	221·75	221·75
(f)	*Mohurbhanj* (2′ 6″ gauge)	...	32·10	32·10
	Total	1,990·30	355·82	2,346·12

Running powers—

Home line over Foreign lines :—

	Miles.
At Katni, East Indian railway } for passenger and goods trains	0·30
At Asansol " " " }	0·50
At Howrah " " " for passenger trains only	1·00
At Nagpur, Great Indian Peninsula railway } for passenger and goods trains.	0·65
Waltair to Vizagapatam including wharf and swamp lines, Southern section, East Coast (State) railway }	4·97
Total	7·42

Foreign line over Home line :—

Great Indian Peninsula railway at Katni (for passenger trains only)	1·60

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads } (a) \text{ to } (f)}$. **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
BENGAL-NAGPUR PROPER—			Miles.	Miles.		Miles.	
Main line—							
Asansol to Damoodur		12-6-89	5·10				
Damoodur to Purulia		14-12-89	41·72				
Purulia to Chakardharpore		22-1-90	72·25				
Chakardharpore to Goilkera		15-5-90	21·96				
Goilkera to Jharsuguda	12-9-84	1-2-91	105·69		Bengal-Nagpur proper.		
Jharsuguda to Raigarh		20-4-90	44·35		1880	53	
Raigarh to Bilaspur		10-2-90	31·90		1881	98	
Bilaspur to Raipur		10-1-89	68·35				
Raipur to Rajnandgaon		4-12-88	41·29		1882	149	The line from Rajnandgaon to Nagpur was originally on the 3′ 3½″ gauge. It was converted to the 5′ 6″ gauge and opened on the 27th November 1883.
Rajnandgaon to Nagpur	1878 and '81	1880, '81 & '82	144·88				
Total main line	...	...	...	626·69	1883	149	
Branches—					1884	149	
Sanctoria coal branch—							
Damoodur to the Sanctoria collieries	12-9-84	12-6-89	7·03				
Aldih branch—							
Mile 0 to mile 1·30	20-2-02	12-2-04	1·30		1885	149	
Mile 1·30 to mile 1·55		19-5-04	0·25				
Mile 1·55 to mile 2·55		13-6-04	1·00		1886	186	
			2·55		1887	186	
Chaurashi branch	17-7-01	1-2-03	8·16		1888	225	
Sambalpur branch—							
Jharsuguda to Sambalpur	July 1891	1-2-93	30·23		1889	348	
Katni branch—							
Bilaspur to Birsinghpur	12-9-84	1-2-91	142·60		1890	584	
Birsinghpur to Umaria		11-5-90	18·48				
Umaria to Katni	Septr. 1884	2-11-86	35·88		1891	831	
Katni-Murwara junction line	...	...	1·98				
			198·94		1892	831	
Calcutta extension—					1893	862	
Sini to Khargpur	August 1895.	1-6-98	29·50				
Khargpur to Khal Bridge		17-12-98	34·30		1894	861	
Khal Bridge to Rajapur Khal		24-5-00	18·72				
Rajapur Khal to Howrah		14-12-00	17·50		1895	861	
			170·02		1896	861	
Banria to Fort Gloster	25-6-00	12-2-04	2·00		1897	861	
Santragachi to Shalimar		15-3-01	2·13				
Hooghly foreshore to Kidderpore Docks		10-4-01	0·60		1898	1,067	
			4·73		1899	1,190	
Cuttack extension—	August 1895						
Kharpur to Balasore		17-12-98	71·25		1900	1,226	
Balasore to Barang (Cuttack)		10-1-99	118·28				
			189·53		1901	1,234	
Midnapore extension—					1902	1,234	
Kharagpur to Cossye river	January 1899	20-12-99	4·75				
Right bank of the Cossye river to Midnapore		8-6-01	3·00		1903	1,370	
			7·75		1904	1,384	
Midnapore-Jharia extension—							
Midnapore to Bhojudih	1-6-01	1-2-03	114·50				
Bhojudih to Bhaga	9-12-01	20-4-03	6·66				
Bhaga to Malkera		1-9-03	3·79				
Bhowra branch	1-11-01	14-5-03	1·95				
Jamadhoba loop—							
Mile 0 to mile 1·33	24-6-03	16-9-03	1·33				
Mile 1·33 to mile 2·28		8-2-04	0·95				
Mile 2·28 to mile 3·04		7-5-04	0·76				
Mile 3·04 to mile 4·02		21-9-04	0·98				
Mile 4·02 to mile 5·50		12-1-04	1·48				
			5·50				
Southern half of the Malkera-Katrasgarh cross connection	1-11-01	24-8-03	0·71				
			138·11				
Total branches	...	...	...	757·05			
TOTAL OPEN MILEAGE, BENGAL-NAGPUR PROPER	...		...	1,383·74			
EAST COAST (STATE) RAILWAY, NORTHERN SECTION—					East Coast (State) railway, Northern section.		The Northern section of the East Coast (State) railway was transferred for working to the Bengal-Nagpur railway from the 1st January 1901.
Main line—							
Cuttack Road (Barang) to Bhubaneshwar	July 1899	1-2-97	10·32		1893	Included with Madras (North-East line).	
Bhubaneshwar to Khurda Road		20-7-96	11·76		1894		
Khurda Road to Rambha		1-3-96	61·54				
Rambha to Berhampur-Ganjam		1-9-95	29·56		1895		
Berhampur-Ganjam to Palasa		1-4-95	45·76				
Palasa to Naupada		17-12-94	33·11				
Naupada to Vizianagram		20-7-94	55·20		1896		
Vizianagram to Waltair		15-7-93	37·50		1897		
Total main line	...	...	...	284·75	1898		
					1899		
Carried over	...	...	...	1,383·74	1900		
				284·75			

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APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads } (a) \text{ to } (f)}$. **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Brought forward ...	...	...	...	1,383·74			
				284·75	1901	319	
					1902	312	The decrease in open mileage in 1903 is due to the swamp line, 4·97 miles, worked by the Madras railway and the Nanpada salt factory line, 2·61 miles, being excluded.
Puri branch—					1903	312	
Khurda Road to Puri	July 1895	1-2-97	25·34		1904	312	
Temporary Puri station to new Puri station		1-6-98	1·84				
Total branch .	...	...	...	27·18			
TOTAL EAST COAST (STATE) RAILWAY, NORTHERN SECTION	...	...	...	311·93			
TOTAL OPEN MILEAGE, BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE . . .	...	...	...	1,695·67			
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—							
BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE—							
Bhojudih to Hariharpur . . .	11-1-01	Probable date January 1906.	26·96				
Malkera to Mohuda		...	5·40				
Colliery lines—							
Bhojudih to Parthadihi	1-11-01	...	2·28				
Total lines under construction .	...	...	...	32·64			
GRAND TOTAL, BENGAL-NAGPUR, 5′ 6″ GAUGE .	...	...	...	1,728·31			
DOUBLE LINE—							
Open—							
BENGAL-NAGPUR RAILWAY, 5′ 6″ GAUGE—							
Howrah to Santragachi	...	14-12-00	3·42				
Santragachi to Bauria	...	17-6-02	10·80				
Shalimar branch	...	...	2·13				
Total .	...	...	16·35				
Under construction—							
Bauria to Ulubaria	3-7-05	1-2-05	5·00				
Ulubaria to Khargpur		...	51·00				
Total .	...	...	56·00				

Details of construction—

Permanent-way.—The Sini-Calcutta-Cuttack section is laid with 85 lb. steel rails on cast iron pot sleepers. The Barang-Waltair section is laid with 75 lb. flat-footed steel rails with 5-holed fish-plates on wooden and steel pea-pod sleepers. On the main line the rails are 75 lb. flat-footed steel, 30 feet long, laid on 10 transverse steel sleepers and two wooden sleepers per rail, except between Nagpur and Kamptee, where 12 steel sleepers per rail are used. On the Bilaspur-Umaria section, 75 lb. flat-footed steel rails are laid on 10 transverse steel sleepers and 2 sâl sleepers at the joints, except between Khongsara and Khodri, where steel sleepers, 10 to the rail, are used. The Sambalpur branch is laid with the same type of permanent-way as is the main line, but no sâl sleepers have been added at rail joints. The Umaria-Katni section was originally laid with second-hand East Indian railway permanent-way on timber sleepers (82 lb. rails on three-fourths of the distance and 74 lb. rails on the remainder), but is now relaid with 75 lb. flat-footed rails on transverse steel sleepers.

Ballast.—The line is ballasted throughout with good stone, except for a few miles on the Chakardharpur district, where laterite is used.

Fencing.—The line is fenced with wire only between Nagpur and Kamptee and at the more important stations, and at some of the station yards and first class level crossings on the Barang-Waltair section. The question of fencing the main line is under consideration.

Curves.—On the main line there are no curves sharper than 1,000 feet radius. On the Sanctoria Coal branch, there is only one curve with a radius of less than 1,000 feet, the length of which is 0·28 mile and radius 800 feet.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

Terms of contracts—

The Bengal-Nagpur railway is worked under the following contracts.—

Contracts of—9th March 1887.—Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Jharsuguda (Sambalpur Road) station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2′ 6″ gauge feeder line with a branch to Rajim; an extension (5′ 6″ gauge) from Sini *viâ* Midnapore to Howrah, with branches from Midnapore to Cuttack and the Jharia coal-fields; a line (2′ 6″ gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Chhindwara; and for the working of the Northern section of the East Coast (State) railway as part of the undertaking.

The general conditions of the contracts are as follows :—

Government aid.—Government guarantee interest in sterling at 4 per cent. per annum on £3,000,000 share capital; on any further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (f)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*a*) Bengal-Nagpur railway proper (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Terms of contracts.—The contracts provide for the Company raising £3,000,000; any further money required being provided either by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

Currency of contracts:—

(1) *Principal contract.*—Government may determine the contract, by giving twelve months' previous notice, on the 31st December 1913, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations, or the line be worked at a loss. On the termination of the contract, the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid in by the Company.

(2) *Sambalpur branch contract.*—The contract for this branch brings it within the provisions of the original contract of 9th March 1887, but provides that the Government may purchase the branch at any time after 1st January 1895, on giving twelve months' notice.

(3) *Contract of 23rd January 1902: Northern section, East Coast (State) railway.*—Government may at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances and without compensation in respect of such retransfer.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure up to Rs. 1,000 and not exceeding Rs. 2,000 at the discretion of the Consulting Engineer, classed as a "Minor Work," subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast (State) railway, bear to the gross earnings of the latter section.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates. The Madras Railway Company has the power to quote through rates in the direction of Madras from Bengal-Nagpur stations between Cuttack and Waltair. The Bengal-Nagpur Railway Company has similarly power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.

Statistics of working—See page 104.

2 (*b*) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles	
Main line—							
Burgi to Nainpur	23-1-01	5-7-04	51·00		1903	75	
Nainpur to Gondia	23-1-01	18-4-03	72·78				
					1904	214	
Total main line, open	...	...	...	123·78			
Branches—							
Chhindwara branch—							
Nainpur to Seoni	23-1-01	12-2-04	47·00				
Seoni to Chaurai	23-1-01	27-7-04	19·25				
Chaurai to Chhindwara	23-1-01	26-11-04	21·29				
			87·54				
Manganese ore branch	23-1-01	18-4-03	2·45				
Total branches, open	...	...	...	89·99			
Total open mileage	...	...	...	213·77			
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—		Probable date.					
Main line—							
Jubbulpore to Howbagh Jabalpur	23-1-01	1-7-05	1·38				
Howbagh Jabalpur to Burgi	23-1-01	7-4-05	16·16				
Branches—							
Mandla branch—							
Nainpur to Mandla	23-1-01	...	22·67				Work on the Mandla branch has not yet been commenced.
Pench Valley branch—							
Chhindwara to Barcoocie	26-6-04	...	21·36				
Khasradeyi to Sirgora	26-6-04	...	7·76				
Total lines under construction	...	...	...	69·33			
GRAND TOTAL	...	...	...	283·10			

Details of construction—

Permanent-way.—The permanent-way consists of 41-lb. flat-footed steel rails, 27 feet long, on sâl sleepers, 11 to a rail.

Ballast.—The line is ballasted with stone, except between Seoni and Chhindwara where good black basolt has been used.

Fencing.—Only important station yards are fenced.

Curves.—The sharpest curve is of 409 feet radius.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number Main head 2 / Sub-heads (a) to (f). **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

2 (*b*) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2′ 6″ gauge)—*concld.*

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working—See below.

2 (*d*) Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Main line—			Miles.	Miles.
Raipur to Kurud	3-5-97	10-9-00	31·50	
Kurud to Dhamtari	3-5-97	17-12-00	14·24	
Total main line	...	...	...	45·74
Branch—				
Abhanpur to Rajim	...	25-10-00	10·50	10·50
GRAND TOTAL	...	...	...	56·24

Details of construction—

Permanent-way.—The line is laid with 31 lb. flat-footed steel rails, 24 feet long on sál sleepers, 12 to a rail on the main line and 11 to a rail on the branch.

Ballast.—Moorum or sand and stone in a few cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 409 feet radius at Raipur station.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working—

TABLE I.

(BENGAL-NAGPUR RAILWAY INCLUDING THE NORTHERN SECTION OF THE EAST COAST (STATE) RAILWAY; RAIPUR-DHAMTARI BRANCH AND THE JUBBULPORE-GONDIA EXTENSION)

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on Capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	28,62,990	...	...	...	83,911	...	—83,911
1880	55,49,511	1,03,952	28,215	0·51	1,58,804	...	—1,30,589
1881	73,65,710	2,51,529	66,056	0·90	2,62,932	...	—1,96,876
1882	90,64,388	6,04,386	1,89,171	2·09	3,39,967	...	—1,50,796
1883	96,43,590	13,20,021	6,83,860	7·09	3,73,283	...	+3,10,577
1884	1,06,34,112	13,23,014	6,58,030	6·19	4,24,400	...	+2,33,630
1885	1,50,66,406	14,14,889	4,93,575	3·28	5,86,281	...	—92,706
1886	1,81,70,455	14,24,521	5,33,514	2·94	7,29,554	...	—1,96,041
1887	2,42,30,987	14,47,705	3,03,207	1·25	13,35,563	...	—10,32,356
1888	5,23,92,291	16,09,195	5,62,971	1·07	22,17,333	...	—16,54,362
1889	7,08,75,456	19,96,930	4,03,160	0·57	29,96,364	...	—25,93,204
1890	8,14,66,762	28,64,578	5,47,463	0·67	33,88,852	...	—28,41,389
1891	9,08,04,164	54,57,356	26,84,453	2·96	35,05,676	...	—8,21,223
1892	9,56,14,736	60,83,562	30,08,166	3·15	39,05,345	...	—8,97,179
1893	9,80,08,424	64,17,751	32,62,220	3·33	43,97,594	...	—11,35,374
1894	9,81,73,789	66,90,648	32,58,414	3·32	45,83,993	...	—13,25,579
1895	9,84,94,777	68,74,740	35 41,444	3·58	48,56,800	...	—13,15,356
1896	11,05,30,319	63,68,525	29,27,569	2·65	48,27,504	...	—18,99,935
1897	13,04,58,784	62,00,309	29,79,559	2·28	51,35,240	...	—21,55,681
1898	14,67,03,520	68,79,193	33,63,954	2·29	54,23,186	...	—20,59,232
1899	16,65,90,365	90,73,469	47,21,814	2·83	59,75,853	...	—12,54,039
1900	17,41,74,604	1,29,75,223	77,13 050	4·43	64 90,687	...	+12,22,413
1901	21,19,23,276	1,50,77,769	61 42,648	2·90	79,88,163	1,78,810	—20,18,325
1902	22,51,91,979	1,42,18,227	69,79,346	3·10	85,44,311	41,604	—16,06,569
1903	24,97,58,940	1,55,47,702	70,45,255	2·82	89,66,131	4,067	—19,24,943
1904	26,14,35,453	1,89,12,137	95,67,326	3·67	95,41,624	355	+45,347

TABLE II.

Calendar year.	Nagpur-Chattisgarh, 3′ 3¾″.		Katni-Umaria, 5′ 6″.		(*a*) Bengal-Nagpur, 5′ 6″.		(*b*) & (*d*) Jubbulpore-Gondia extension and Raipur-Dhamtari branch, 2′ 6″.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings	Earnings per mile per week.	Pro: of exp: to earnings	Earnings per mile per week.	Pro: of exp: to earnings.
1879	...	...	...	...	...	...	...	...
1880	51	79·54	...	...	...	...	...	...
1881	37	76·53	...	...	...	...	...	...
1882	114	68·70	...	...	...	...	...	...
1883	170	48·19	...	...	...	...	...	...
1884	171	57·82	...	...	...	...	...	...
1885	183	65·12	...	...	...	...	...	...
1886	184	62·51	37	104·35	...	...	...	...
1887	177	59·09	41	116·41	...	...	...	...
1888	...	...	...	...	164	67·58	...	...
1889	...	...	...	...	131	80·98	...	...
1890	...	...	...	...	101	80·89	...	...
1891	...	...	...	...	129	50·81	...	...
1892	...	...	...	...	141	50·55	...	...
1893	...	...	...	...	144	49·17	...	...
1894	...	...	...	...	149	51·30	...	...
1895	...	...	...	...	133	48·49	...	...
1896	...	...	...	...	142	54·03	...	...
1897	...	...	...	...	138	51·94	...	...
1898	...	...	...	...	143	51·10	...	...
1899	...	...	...	...	152	47·96	...	...
1900	...	...	...	...	207	40·56	...	...
1901	...	...	...	...	161	52·58	25	72·12
1902	...	...	...	...	176	51·09	21	77·27
1903	...	...	...	...	178	54·63	21	61·98
1904	...	...	...	...	210	48·97	31	67·32

2 (*c*) Parlakimedi Light railway (2′ 6″ gauge)—

On the 20th May 1901, the Indian Railways Act, IX of 1890, except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (f)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM**—*concld.*

2 (*e*) Parlakimedi Light railway (2′ 6″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Naupada to Parlakimedi	14-3-98	1-4-00	24·62	24·62

Details of construction—

Permanent-way.—The line is laid with 30 lb. flat-footed steel rails, 24 feet long, and transverse wooden sleepers, 9 to a rail.

Ballast.—The line is ballasted throughout with laterite, gravel and stone.

Fencing.—Short lengths of wire and post fencing on dry stone walling have been provided in a few places where the railway in cutting runs alongside the road.

Curves.—There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Parlakimedi Light railway is worked under an agreement, dated the 14th April 1902, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows :—

Government aid.—*Nil.* The line is the property of the Raja of Parlakimedi.

Currency of agreement.—The agreement was current to end of 1904 subject to renewal.

Terms of working.—Actual cost.

Rates and fares.—To be fixed by the Company.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	...	...	...	...	...	...
1902	...	...	...	...	...	...
1903	7,10,974	16,633	—2,265	...	13	155·70
1904	7,10,974	20,675	—1,301	...	16	106·29

2 (*e*) Gondia-Chanda (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Gondia to Chanda	26-8-04	...	158·00	
Pauni to Nagpur		...	63·75	
Total .	...	...	...	221·75

Commencement of work is deferred pending the receipt of the results of the resurvey in hand for an alignment suitable for easy conversion to the 5′ 6″ gauge when required.

2 (*f*) Mohurbhanj railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Rupsa to Baripada	18-7-02	20-1-05	32·10	32·10

Details of construction—

Permanent-way.—The line has been laid with 30 lb. flat-footed steel rails, 24 and 30 feet long, on sál sleepers, 12 to a 30 feet rail.

Ballast.—The line is ballasted with screened laterite, gravel and broken laterite stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius. There are three such curves, the total length of which is 0·60 mile.

Gradient.—The ruling gradient is 1 in 100.

Terms of contract—

The line will be worked under an agreement between the Maharaja of Mohurbhanj and the Bengal-Nagpur Railway Company, approved in Railway Board's letter No. 228 R.T. of the 10th March 1905.

The general conditions of the agreement are as follows :—

Government aid.—*Nil.* The line is the property of the Maharaja of Mohurbhanj.

Currency of agreement.—To the end of 1905.

Terms of working.—Actual cost.

Rates and fares.—To be fixed by the Company.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—**

Lines comprising system—The Bombay, Baroda and Central India railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(a) Bombay, Baroda and Central India railway	(5′ 6″ gauge) 465·12 (3′ 3¾″ gauge) 39·23	504·35	...	504·35
(b) Godhra-Eutlam-Nagda railway	(5′ 6″ gauge)	141·14	...	141·14
(c) Nagda-Ujjain railway	(5′ 6″ gauge)	34·32	...	34·32
(d) Petlad-Cambay railway (Anand-Tarapur section)	(5′ 6″ gauge)	21·50	...	21·50
(e) Petlad-Cambay railway (Tarapur-Cambay section)	(5′ 6″ gauge)	10·93	1·39	12·31
(f) Tapti Valley railway	(5′ 6″ gauge)	155·48	...	* 155·48
(g) Ahmedabad-Dholka railway	(3′ 3¾″ gauge)	33·50	...	33·50
(h) Ahmedabad-Parantij railway	(3′ 3¾″ gauge)	54·70	...	54·70
(i) Gaekwar's Mehsana railway	(3′ 3¾″ gauge)	92·63	...	92·63
(j) Palanpur-Deesa railway	(3′ 3¾″ gauge)	17·28	...	17·28
(k) Rajputana-Malwa railway	(3′ 3¾″ gauge)	1,681·85	100·60	1,782·45
(l) Vijapur-Kalol-Kadi railway	(3′ 3¾″ gauge)	41·37	...	41·37
(m) Gaekwar's Dabhoi railway	(2′ 6″ gauge)	94·49	...	94·49
(n) Rajpipla railway	(2′ 6″ gauge)	37·37	...	37·37
(o) *Jaipur (Siwai-Madhopur) railway*	(5′ 3¾″ gauge)	...	72·85	72·85
	Total	2,920·90	174·84	3,095·74

Running powers—

Home line over Foreign line :—

	Miles.
Dadar Junction to Carnac bridge, Great Indian Peninsula railway (for goods trains only)	4·39

Foreign lines over Home line :—

East Indian railway, Agra East Bank to Agra Fort (for goods trains only)	1·06
Great Indian Peninsula railway at Ujjain (for passenger and goods trains)	6·24
" " " Dadar Junction to Colaba (for goods trains only)	7·75
" " " at Agra (for passenger and goods trains)	2·89
	11·38

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Total mileage open.	Remarks.
			Miles.	Miles.		Miles.	
Main line—							
Colaba to Marine lines	May 1856	18-1-70	2·00		1860	36	
Marine lines to Charni Road	1868	19-6-69	0·75				
Charni Road to Bellasis Road	Charni Road to Grant Road, May 1858; Grant Road to Dadar, July 1858; Dadar to 20th mile (from Colaba), Dec. 1858; 20th mile (from Colaba) to Surat, 1858.	13-9-68	9·75		1861	134	
					1862	167	
Bellasis Road to Bulsar		23-11-64	121·00		1863	185	
					1864	206	
Bulsar to Navsari		2-9-61	24·25		1865	306	
					1866	306	
Navsari to Sachin		20-5-61	9·25		1867	306	
					1868	307	
Sachin to Surat		18-3-61	9·00		1869	307	
Surat to Amroli		19-11-60	2·25				
Amroli to Ankleswar		10-2-60	28·75		1870	312	
Ankleswar to the Nerbudda		5-12-60	5·50				
Nerbudda to Broach	1857	22-6-60			1871	350	
Broach to Baroda	and	9-1-61	43·75				
Baroda to Dholia	1859	22-4-61	11·25		1872	389	
Dholia to Mohmadabad		3-9-62	33·25				
Mohmadabad to Ahmedabad		21-1-63	17·59		1873	472	
Ahmedabad to Sabarmati		1-1-70	8·75				
Sabarmati to Sanand	October	24-5-71	13·75		1874	428	
Sanand to Viramgam (5′ 3¾″ *gauge.*)	1870	30-11-71	22·98				The line from Viramgam to Wadhwan was originally on the 5′ 6″ gauge. It was sanctioned on 24th October 1870 and opened on 25th May 1872.
Viramgam to Wadhwan	21-4-02	14-12-02	39·23				
Total main line, carried over	...	...	...	389·35			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number Main head 3 / Sub-heads (*a*) to (*o*) **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM**—*contd.*

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.	Remarks.
			Miles.	Miles.		Miles.	
Brought forward—Total main line	...	...	...	389·35	1875	430	
Branches—					1876	439	
Godhra branch—					1877	444	
Anand to Dakor	5-11-73	8-4-75	16·75		1878	444	
Dakor to Rukhyal	...	6-1-75	1·75		1879	444	
Rukhyal to Hungari	...	6-12-76	9·00				
Hungari to Pali	...	29-1-77	4·71		1880	444	
Pali to Godhra	...	26-2-82	17·00		1881	444	
			49·21		1882	461	
Patri branch—					1883	461	
Kharaghoda to Viramgam	13-6-71	12-5-73	42·12		1884	461	
Godhra-Baroda chord—					1885	461	
Baroda to Godhra	6-6-02	23-12-03	43·67		1886	461	
					1887	461	
Total branches	...	...	...	115·00	1888	461	
					1889	461	
TOTAL OPEN MILEAGE, BOMBAY, BARODA AND CENTRAL INDIA PROPER.	...	...	...	501·35			
					1890	461	
					1891	461	
					1892	461	
DOUBLE LINE—					1893	461	
Colaba to Marine lines	18-1-70		1·91		1894	461	
Marine lines to Charni Road	19-6-69		0·71				
Charni Road to Hellasis Road	13-9-68		1·29				
Bellasis Road to Mahim	20-7-65		5·44		1895	461	
Mahim to Bandra	23-2-66		1·07		1896	461	
Bandra to Santa Cruz	23-5-66		1·83		1897	461	
Santa Cruz to Andheri	29-8-67		2·71		1898	461	
Andheri to Bhayndar	27-1-65		13·28		1899	461	
Bhayndar to Virar	1-10-35		10·34				
Virar to Palghar	1-12-97		19·28		1900	461	
Palghar to Dahanu Road	17-1-98		20·37		1901	461	
Dahanu Road to Gholvad	20-4-00		6·68		1902	461	
Gholvad to Daman Road	12-10-00		23·19		1903	504	
Daman Road to Bulsar	29-1-02		16·44		1904	504	
Bulsar to Sachin	21-4-02		32·90				
Sachin to Kankra Khari	4-7-87		6·35				
Kankra Khari to Surat	5-4-68		2·72				
Surat to Amroli	9-10-67		2·19				
Amroli to Sayan	25-5-98		6·43				
Sayan to Kim	1-10-03		6·33				
Kim to Anklesvar	11-12-99		16·16				
Broach to Miyagam	15-10-99		25·42				Of the total double line of 251·90 miles, 4·17 miles, Anklesvar to Norbudda Block station, have been constructed but not opened for traffic.
Miyagam to Itola	15-9-97		7·83				
Itola to Baroda	7-6-95		10·77				
Barejadi to Ahmedabad	2-6-87		16 21				
TOTAL DOUBLE LINE	...	...	251·90				

Details of construction—

Permanent-way.—The main line was laid orginally from Colaba to Sabarmati with 68 lb. double-headed iron rails on wooden sleepers and from Sabarmati to Wadhwan with 60 lb. double-headed iron rails on cast-iron round pot sleepers. Both these lengths were subsequently renewed with 69 lb. double-headed steel rails, 20, 30 and 40 feet long, on creosoted pine, deodar and cast-iron oval pot sleepers. The Colaba-Bandra length has since been relaid with 82 lb. bull-headed rails, 40 feet long, on creosoted pine sleepers, 15 to a rail, and the Viramgam-Wadhwan section converted to metre gauge and relaid with 41½ lb. flat-footed steel rails, 30 feet long, with a small percentage of 24 and 27 feet on deodar sleepers, 11 to a 30 feet rail. As regards the second line on the doubled section, the Colaba-Bandra section was laid originally with 68 lb. double-headed iron rails which were renewed with 69 lb. steel, and have since been replaced by 82 lb. bull-headed, 40 feet long, on creosoted pine sleepers, 15 to a rail; from Bandra to Virar is laid with 69 lb. double-headed steel, 20 and 30 feet long, on wooden sleepers, 7 to a 20 and 11 to a 30 feet rail; from Virar to Sachin, with 82 lb. bull-headed, 40 feet, with a small percentage of 35 and 30, on creosoted pine and cast-iron oval pot sleepers, 15 and 14 to a rail; from Sachin to Amroli with 69 lb. double-headed, 20 feet long, chiefly on creosoted pine sleepers, 7 to a rail; from Amroli to Anklesvar, and Broach to Itola are laid with rails, etc., similar to the Virar-Sachin section; from Itola to Baroda and Barejadi to Ahmedabad are laid with 69 lb. double-headed steel rails, 30 feet long, on cast-iron pot sleepers, 10 to a rail.

The Godhra branch was laid originally with double-headed iron rails of 60 lb. up to Sevalia and of 61 lb. from Sevalia to Godhra on cast-iron round pot sleepers; the former section and 2 miles of the latter section from Godhra have been renewed with 69 lb. double-headed steel rails, 30 feet long, on cast-iron oval pot sleepers, 10 to a rail.

The Patri branch was laid originally with 48lb. flat-footed iron rails on wooden sleepers, 15 miles of which have been renewed with 48lb. and 50lb. flat-footed steel rails, 20, 24 and 40 feet long, on creosoted pine and deodar sleepers, 6 to a 20 feet, 8 to a 24 feet, and 14 to a 40 feet rail.

On the Baroda-Godhra Chord, for the first 7 miles, 82 lb. bull-headed rails, 40 feet long, are laid on cast-iron oval pot sleepers, 14 to a rail, and for the remainder, 75lb. flat-footed steel rails, 30 feet long, and a small percentage of 27 and 24 feet rails are laid on cast-iron pot sleepers, Indian Midland railway pattern, 10 to a 30 feet rail.

Ballast.—The line from Colaba to Broach is ballasted with broken stone, from Broach to Baroda with gravel and shingle, Baroda to Viramgam with gravel, Viramgam to Wadhwan with sand and a covering of stone; Godhra branch, with gravel chiefly and partly with stone; Patri branch with sand and Baroda-Godhra Chord with gravel and stone metal.

Fencing.—The main line from Colaba to Ahmedabad is fenced with wire fencing made of old rail posts, galvanized iron posts, iron posts of Government type, and wooden posts which are being replaced by iron posts of Government type; and from Ahmedabad to Wadhwan, 25½ miles with cactus and the remainder with wire fencing, made of old rail posts, tiebar

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″gauge)—*contd.*

Details of construction—*concld.*

posts and wooden posts. The cactus is being replaced gradually by iron posts of Government type. The Godhra branch is fenced with wire fencing chiefly of old rail posts and 2½ miles cactus which is being replaced by iron posts. The Patri branch is unfenced. The Baroda-Godhra Chord is being fenced with iron posts of Government type.

Curves.—The sharpest curve on the main line is of 1,500 feet radius, 700 feet long, north of Charni Road level crossing; on the Godhra branch, of 1,500 feet radius, 1,850 feet long, at Anand Junction; on the Patri branch, of 2,865 feet radius, 792 feet long, at mile 10 and on the Godhra-Baroda Chord, of 1,910 feet radius, 1,666 feet long, at mile 38·39.

Gradients.—The ruling gradient on the greater part of the main line is 1 in 500, but short lengths of 1 in 200 and even 1 in 100 exist in the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge, where it is 1 in 80; on the Patri branch and the Godhra-Baroda Chord, it is 1 in 300, except for short lengths of 1 in 200 on the latter.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—21st November 1855—for the construction and working of a line from Surat to Baroda and thence to Ahmedabad.

2nd February 1859—for the construction and working of a line from Bombay to Surat as one undertaking.

17th November 1871—for the construction and working of an extension line to Viramgam and Wadhwan.

14th May 1886—Supplemental to that of 1855, incorporating the branch line from Anand to Dakor and its extension to Pali (Sevalia) and Godhra with the general undertaking.

1st February 1901—as to share of working expenses debitable to branch lines worked.

The general conditions of the contracts are as follows:—

Government aid.—Guarantee of interest in sterling at 5 per cent. for the term of the contract. On some portion of the share capital and on debentures lower rates of interest are also guaranteed.

Currency of contracts.—The contracts are current for a period of 99 years from 1855, after which the line becomes the property of Government on payment of the actual capital outlay in sterling. The Government may, however, determine the contracts by purchase after the expiration of 25 or 50 years of the term, namely in 1880 or 1905, at the mean market value of the shares during the three preceding years, possession being taken of the railway at the half-yearly day next but one following the notice. The Government may also determine the contracts at any time, on giving three months' notice, if the Company fails to observe its obligations. In such case, Government repay the capital expended.

NOTE.—The Government relinquished their right to determine the contracts at the end of the 25th year, and the only remaining opportunity of giving notice of purchase will be in 1905 (within six months of the 1st of May).

Power of Company to surrender contract.—The Company may surrender, on six months' notice, at any time receiving back the capital expended.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 to be classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 5,000 in each half-year) surplus profits, after repayment of the guaranteed interest of each half-year, are divided equally between Government and the Company; the interest payments being calculated for the purpose of this division at 1*s.* 10*d.* to the rupee.

Rates and fares.—Under the contract, Government fixed maxima rates and fares which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot also be altered by the Company without Government sanction. Authority has, however, been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Guaranteed Interest, (converted at current rates of exchange).	Company's share of net earnings (arrived at under terms of contract).	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	8,54,16,162	71,52,788	32,13,354	3·76	43,69,254	..	—11,55,900
1880	8,47,81,626	82,44,876	47,34,654	5·58	43,69,254	5,83,846	—8,02,293
1881	8,66,45,448	97,45,133	56,78,755	6·55	43,69,254	8,30,798	+5,78,708
1882	8,75,89,091	1,01,76,190	50,15,619	5·73	43,07,784	5,06,346	—98,461
1883	8,89,91,377	1,19,22,209	67,16,067	7·54	43,38,189	11,44,829	+13,33,049
1884	9,02,69,608	1,21,95,580	68,87,562	7·63	49,99,841	13,17,768	+5,70,453
1885	9,22,58,636	1,31,40,336	74,01,987	8·02	52,35,189	14,57,541	+7,89,257
1886	9,16,82,002	1,35,05,635	78,73,228	8·59	55,87,440	16,97,985	+5,87,803
1887	9,32,12,200	1,21,64,856	69,98,127	7·50	57,17,818	12,56,055	+24,754
1888	9,45,57,948	1,27,32,933	70,48,164	7·45	60,29,893	12,68,879	—2,50,608
1889	9,49,45,797	1,22,34,371	75,41,081	7·94	61,10,257	14,96,390	—56,566
1890	9,53,16,045	1,29,40,370	74,23,195	7·79	54,66,227	14,22,120	+5,34,848
1891	9,55,86,799	1,41,37,769	83,25,120	8·69	58,61,996	18,06,348	+5,56,776
1892	9,55,23,735	1,42,44,478	81,30,959	8·51	65,57,945	17,86,755	—2,13,741
1893	9,62,57,801	1,50,96,045	95,78,044	9·95	66,44,227	25,09,537	+4,24,280
1894	9,77,45,855	1,59,48,484	1,00,70,974	10·30	75,09,071	27,35,713	—2,73,510
1895	9,97,90,965	1,75,58,067	1,09,37,063	10·96	77,03,258	31,27,619	+66,186
1896	10,31,57,107	1,62,03,933	89,00,862	8·60	73,03,613	20,78,128	—4,90,879
1897	10,63,10,220	1,42,61,208	64,70,202	6·09	69,36,853	9,51,545	—14,18,196
1898	10,85,60,144	1,58,62,726	87,42,205	8·05	67,87,071	19,49,477	+5,827
1899	11,10,73,858	1,74,65,045	92,90,365	8·15	67,46,668	21,68,922	+3,74,775
1900	11,60,94,044	1,75,98,486	82,28,632	7·08	68,33,449	15,68,577	—1,75,394
1901	11,95,61,022	1,59,38,796	87,53,789	7·32	70,04,569	18,11,890	—66,670
1902	12,18,78,965	1,57,43,536	79,37,622	6·51	71,28,187	12,93,644	—4,84,809
1903	12,37,38,239	1,69 63,022	84,95,201	6·87	72,59,871	15,12,518	—2,77,188
1904	12,44,90,478	1,78,23,363	93,87,312	7·54	73,66,912	16,91,136	+1,09,264

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.			Rs.			Rs.			Rs.	
1860	49	70·17	1871	300	59·98	1882	427	50·76	1893	630	36·55
1861	73	54·97	1872	290	59·97	1883	497	43·10	1894	665	36·85
1862	94	50·14	1873	269	59·23	1884	509	42·95	1895	732	37·69
1863	138	49·51	1874	565	52·12	1885	548	43·11	1896	676	45·07
1864	156	85·23	1875	285	54·41	1886	564	41·12	1897	595	54·63
1865	223	63·33	1876	296	54·74	1887	508	41·89	1898	662	44·69
1866	278	71·93	1877	345	41·97	1888	532	44·11	1899	729	46·81
1867	291	66·56	1878	298	46·61	1889	552	42·44	1900	734	52·50
1868	287	73·66	1879	309	46·97	1890	540	42·06	1901	665	44·06
1869	307	74·32	1880	355	42·57	1891	590	41·23	1902	659	49·00
1870	327	60·54	1881	423	41·04	1892	594	42·92	1903	753	49·46
									1904	718	47·12

3 (*b*) Godhra-Rutlam-Nagda railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Godhra to Limkhera	29-10-90	16-1-93	25·09		1893	25
Limkhera to Dohad		7-3-94	19·55		1894	115
Dohad to Rutlam		22-10-94	70·46		1895	215
Rutlam to Nagda	Dec. 1894	11-5-96	26·04		1896 to 1904	141
TOTAL	...	...	...	141·14		

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails, 30 feet long, laid on transverse steel, deodar and creosoted pine sleepers, 11 to a rail.

Ballast.—The line is ballasted throughout with broken stone and gravel.

Fencing.—There are in all 76½ miles of wire fencing, 25 miles between Godhra and Limkhera, 31 miles between Limkhera and Bajranggarh (with the exception of a small bit of line and 3 miles on one side only) and 20½ miles between Bajranggarh and Rutlam. The rest of the line is unfenced except in station yards where wire is used.

Curves.—The sharpest curve is of 1,000 feet radius, 1,162 feet long, at Rutlam.

Gradients.—The ruling gradient is 1 in 200, with short lengths of 1 in 100 and 1 in 101 to 1 in 150, between Godhra and Jekot.

Terms of contracts—

This is a State line and is worked as a part of the Rajputana-Malwa railway under the contracts and conditions relating to that railway.

Statistics of working—

Included with the Rajputana-Malwa railway.

3 (*c*) Nagda-Ujjain railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Nagda to Ujjain	17-12-94	15-7-96	34·32	34·32

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (c)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*c*) Nagda-Ujjain railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails, 30 feet long, with 5 bolt-hole fish-plates, laid on cast-iron oval pot sleepers, Indian Midland railway pattern, 10 and 11 to a rail.

Ballast.—The line is ballasted with broken stone.

Fencing.—Only the station yards are fenced with wire.

Curves.—The sharpest curve is of 1,910 feet radius, 2,446 feet long, at Nagda.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The line is owned by the Gwalior state and worked under the following:—

Agreement of—15th July 1896 (between His Highness the Maharaja of Scindia and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—*Nil.* The line is the property of the Scindia state.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement.— } party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares.—Conform generally with those in force on the Godhra-Ratlam-Nagda railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	5,33,360	...	...	...	...	...
1896	20,71,251	40,701	17,762	0·86	49	56·36
1897	22,19,919	1,04,639	47,756	2·15	58	54·36
1898	22,31,596	1,29,627	71,509	3·20	78	44·83
1899	22,34,346	1,47,175	77,732	3·48	88	47·18
1900	22,29,758	2,51,783	1,20,956	5·42	141	51·96
1901	22,31,982	1,12,366	67,208	3·01	63	40·19
1902	22,39,663	1,57,211	85,851	3·83	88	45·39
1903	22,41,230	1,20,951	62,949	2·81	68	47·95
1904	22,41,231	1,23,654	66,441	2·96	69	46·27

3 (*d*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Anand to Petlad	Dec. 1888	5-5-90	13·17		1890 to 1900	13
Petlad to Tarapur	4-7-99	20-6-01	8·33			
TOTAL	...	...	...	21·50	1901 to 1904	21

Details of construction—

Permanent-way.—The permanent-way consists of 66½ lb. flat-footed steel rails, 30 feet long, on steel sleepers, from Anand to Petlad and on creosoted pine sleepers, from Petlad to Tarapur, 10 sleepers to a rail.

Ballast.—The line is ballasted with gravel.

Fencing.—Of 13 miles between Anand and Petlad 1 mile is fenced with wire and 12 miles with cactus. The rest of the line is unfenced, except in station yards which are fenced with wire.

Curves.—The sharpest curve is of 1,433 feet radius, 920 feet long, at Anand junction.

Gradients.—The ruling gradient is 1 in 200.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*d*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—*concld.*

Terms of contracts—

The line is owned by the Baroda state and worked under the following :—

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows :—

Government aid.—*Nil.* The line is the property of the Baroda state.

Currency of agreement.— } Either party may terminate the agreement at any time on giving one year's
Power to determine agreement.— } notice.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vijapur-Kalol-Kadi railways.

Rates and fares.—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	TABLE II. Gaekwar's Petlad, 5′ 6″. Earnings per mile per week.	Gaekwar's Petlad, 5′ 6″. Proportion of expenses to earnings.	Petlad-Cambay (Anand-Tarapur section), 5′ 6″. Earnings per mile per week.	Petlad-Cambay (Anand-Tarapur section), 5′ 6″. Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.		Rs.	
1888	11,030	...	...	...	...	...	...	...
1889	4,71,822	...	...	...	...	...	...	...
1890	6,47,922	32,649	20,870	3·22	71	36·08	...	...
1891	7,10,118	59,113	36,346	5·12	85	38·51	...	...
1892	7,11,081	61,243	34,757	4·89	88	43·25	...	...
1893	7,12,768	63,953	40,627	5·70	92	36·47	...	...
1894	7,23,482	69,688	44,037	6·09	100	36·79	...	...
1895	7,23,193	72,891	46,584	6·44	106	36·98	...	...
1896	7,28,616	1,17,540	82,847	11·45	169	29·52	...	...
1897	7,55,769	64,737	33,946	4·49	93	47·56	...	...
1898	7,49,047	51,121	28,156	3·76	74	44·92	...	...
1899	7,52,439	70,668	39,312	5·22	102	44·37	...	...
1900	7,52,097	88,481	41,713	5·55	127	52·86	...	...
1901	11,86,331	98,233	51,769	4·36	...	...	101	44·47
1902	11,85,930	1,05,951	56,818	4·79	...	...	95	46·37
1903	11,48,092	98,451	50,289	4·38	...	...	88	48·92
1904	11,46,552	1,20,974	64,876	5·66	...	...	106	46·37

3. (*e*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Tarapur to Cambay	4-7-99	20-6-01	10·92	10·92
Line under construction—				
Cambay to Cambay Bandar	1-12-04	...	1·39	1·39
Grand Total	...	...	...	12·31

Details of construction—

Permanent-way.—The permanent-way consists of 66½ lb. flat-footed steel rails, 30 feet long, laid on creosoted pine sleepers, 10 to a rail.

Ballast.—The line is ballasted with gravel.

Fencing.—Only the station yards are fenced with wire.

Curves.—The sharpest curve is of 1,910 feet radius and 648 feet long.

Gradients.—The ruling gradient is 1 in 600, with a little bit of 1 in 200, between Sayama and Cambay.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*e*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—*concld.*

Terms of contracts—

The line is owned by the Cambay state and worked under—

Agreement of—17th May 1902 (between the Cambay state and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:—

Government aid.—*Nil.* The line is the property of the Cambay state.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement.— } party, expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Cambay state and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	7,49,676	12,011	5,950	0·79	40	50·46
1902	7,49,676	25,497	13,622	1·81	45	46·57
1903	7,49,676	25,151	12,803	1·71	44	49·10
1904	7,68,728	32,199	17,276	2·25	57	46·35

3 (*f*) Tapti Valley railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Kankra Khari to Vyara	...	1-12-98	35·59			
Vyara to Chinchpada	...	10-7-99	36·55		1898	36
Chinchpada to Nandurbar	...	8-10-99	25·20		1899	139
Nandurbar to Dondaiche	...	11-11-99	21·44		1900	
Dondaiche to Nardana	...	25-11-99	19·78		to	155
Nardana to Amalner	...	15-3-00	16·92		1904	
Total	...	...	...	155·48		

Details of construction—

Permanent-way.—The permanent-way consists of 70 lb. flat-footed steel rails, 30 feet long, with a small percentage of 24 and 27 feet rails, laid on creosoted pine, and a small proportion of country teak sleepers, 11 to a 30 feet rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced with wire.

Curves.—The sharpest curves are of 1,910 feet radius, 2,333 feet long, between mile 0 and 1, 925 feet long, at mile 36, 1,501 feet long, at mile 48 and 1,421 feet long, at mile 155.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is owned by the Tapti Valley Railway Company and worked under the following contracts:—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* a sum of Rs. 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory has also been provided free.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*f*) Tapti Valley railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Table I.								Table II.		Remarks.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from B.,B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1896	8,390	...	...	...	...	...	...	...	...	The net earnings for 1898, 1899 and 1st-half of 1900 were credited to interest on capital, and those for 2nd-half of 1900 (including rebate) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of 1901. Excluding interest, Rs. 4,483, on the capital cost of works at Amalner junction, the percentage of income on capital outlay in 1903 was 4·00.
1897	20,96,294	...	...	...	...	...	...	...	...	
1898	6,04,45,413	2,836	...	...	...	...	...	18	48·70	
1899	1,21,09,133	2,42,593	...	...	...	...	...	71	47·40	
1900	1,28,31,291	6,68,475	...	...	...	...	...	84	44·00	
1901	1,29,18,730	6,00,553	3,42,243	2·65	33,223	3,75,469	2·90	74	43·01	
1902	1,29,70,581	8,26,485	4,64,242	3·57	45,196	5,08,438	3·92	102	43·95	
1903	1,30,02,400	8,62,758	4,83,142	3·72	40,258	5,23,400	4·03	107	44·00	
1904	1,30,77,018	6,58,740	3,68,294	2·82	28,441	3,97,335	3·04	81	44·00	

3. (*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sabarmati to Bavla	2-10-01	23-2-03	24·75	...
Bavla to Dholka		1-4-03	8·75	...
TOTAL	...	...	...	* 33·50

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 24 feet long, laid on deodar sleepers, 9 to a rail.

Ballast.—Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and level crossings.

Fencing.—Only the station yards are fenced with wire.

Curves.—The sharpest curve is of 1,146 feet radius 1,147 feet long, at mile 8¼.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the contracts are as follows :—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines, proportionate to its total earnings, but not exceeding 4¼ per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maxima and minima rates and fares in force on the undertaking.

Statistics of working—

	Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from Bombay, Baroda and Central India railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	10,13,420	64,261	35,986	3·55	...	35,986	3·55	45	44·00
1904	10,17,308	99,044	55,465	5·45	...	55,465	5·45	57	44·00

3. (*h*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Ahmedabad to Talod	January 1896.	1-5-97	32·82	
Talod to Parantij		2-7-97	7·83	
Parantij to Idar-Ahmednagar		23-10-97	14·05	
TOTAL .	...	...	...	54·70

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails, 24 feet long, laid on creosoted pine sleepers from mile 18¼ to 31 and on transverse deodar for the remainder. There are 9 sleepers to a rail.

Ballast.—The line from mile 1 to 47¼ is ballasted with kunkur, from 47¼ to 53¼ with sand and the remainder with stone.

Fencing.—Only the station yards are fenced with wire.

Curves.—The sharpest curve is of 1,146 feet radius, 1,569 feet long, at mile ¼.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The Ahmedabad-Parantij railway is worked under the following contracts:—

Contracts of—13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land has also been provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines, proportionate to its total earnings but not exceeding 4¼ per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 3}{\text{Sub-heads } (a) \text{ to } (o)}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*h*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	13,12,752	...	...	...	...	...	...	...	...
1897	19,42,211	69,069	36,665	1·89	...	36,665	1·89	46	46·92
1898	19,42,971	1,49,790	85,836	4·42	...	85,836	4·42	33	49·70
1899	19,49,616	2,10,634	1,21,687	6·24	...	1,12,687	6·24	74	42·23
1900	19,53,305	2,65,105	1,55,952	7·98	...	1,55,952	7·98	93	41·17
1901	19,49,855	1,77,488	99,365	5·10	...	99,365	5·10	62	44·00
1902	19,70,012	1,79,794	1,00,685	5·11	...	1,00,685	5·11	63	40·04
1903	18,88,869	1,50,112	84,063	4·45	...	84,063	4·45	53	44·00
1904	19,89,045	1,86,227	1,04,287	5·24	...	1,04,287	5·24	65	44·00

3 (*i*) Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mehsana to Vadnagar	...	21-3-87	20·73		1887	21
Vadnagar to Kheralu	...	12-12-88	7·00		1888	28
Mehsana to Viramgam	...	1-2-91	40·21		1889	28
Mehsana to Patan	...	20-7-91	24·69		1890	28
					1891 to 1904	93
Total	...	...	...	92·63		

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. steel rails, on transverse steel sleepers between Mehsana and Kheralu and on deodar sleepers between Mehsana and Viramgam, except in the first 2½ miles which are laid with trough sleepers. The Mehsana-Patan section is laid with 40 lb. iron rails on deodar sleepers, except in station yards and for the first 3 miles which are laid with 41½ lb. steel rails. The rails are flat-footed and 24 feet long and there are 9 sleepers to a rail.

Ballast.—The line between Mehsana and Kheralu is ballasted with sand and the rest with kunkur.

Fencing.—The whole line, except 41½ miles which are fenced by wire, was originally fenced with cactus; but this has in several places been entirely destroyed by floods and locusts, and what remains is much broken up.

Curves.—The sharpest curve is of 1,910 feet radius. There are two such curves, one 400 feet long at mile 28 on the Mehsana-Viramgam section and the other 1,550 feet long at mile ½ on the Mehsana-Patan section.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda state and is worked under the following:—

Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1887	13,55,493	27,890	5,564	0·41	33	80·05
1888	9,16,565	47,502	16,672	1·82	43	64·90
1889	11,18,446	53,290	20,348	1·82	37	61·82
1890	25,44,340	59,241	23,808	0·92	41	60·66
1891	29,04,950	1,94,247	1,05,801	3·64	49	45·53
1892	29,71,610	2,58,963	1,53,065	5·15	54	40·92
1893	30,26,752	3,26,359	1,98,250	6·55	70	41·12
1894	30,94,578	3,79,972	2,36,837	7·64	79	37·79
1895	32,55,044	3,88,444	2,02,440	6·22	79	40·18
1896	32,61,448	4,33,283	2,71,262	8·32	88	35·91
1897	32,63,900	3,39,125	1,18,358	3·63	70	46·38
1898	32,82,612	3,46,491	1,99,052	6·07	72	42·55
1899	32,83,612	3,76,160	2,16,654	6·60	79	42·40
1900	33,01,950	4,28,545	2,36,754	7·17	89	44·75
1901	33,48,911	3,92,227	2,15,111	6·42	81	45·16
1902	33,63,329	3,74,515	1,98,977	5·92	78	46·87
1903	33,78,132	3,47,063	1,77,466	5·25	72	48·87
1904	33,95,678	3,82,249	2,04,906	6·06	79	46·39

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*j*) Palanpur-Deesa railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Palanpur to Deesa	20-3-92	8-11-93	17·28	17·28

Details of construction—

Permanent-way.—The permanent-way consists of 40 lb. flat-footed iron rails, 24 feet long, except in station yards and the first 3 miles of line which are laid with 41½ lb. rails, 24 feet long. The rails are laid on Denham-Olpherts' plate, cast-iron, pot, and on steel dish cover sleepers, 9 to a rail.

Ballast.—The line for the first 7½ miles is ballasted with stone and the remainder with sand.

Fencing.—The entire length, with the exception of a little wire fencing at mile 2, is fenced with cactus.

Curves.—The sharpest curve is of 1,910 feet radius, 3,200 feet long, at mile ½.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under—

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No. 62 Ry., dated 23rd June 1892, from the Secretary of State to the Government of India.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—The line is owned jointly by Government and the Palanpur Durbar.

Currency of contract.—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.

Power of Company to surrender contract.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs. 25,117, the extra expenditure incurred in providing a 5′ 6″ gauge sub-structure.

Rates and fares.—Same as on the Rajputana-Malwa railway.

Statistics of working—

Calendar year.	Table I. Palanpur-Deesa (Native State section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Palanpur-Deesa (British section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1892	20,000	...	...	...	46,746	...	...	...	1,031	−1,031	...	...
1893	1,85,000	2,255	1,335	0·72	1,78,953	2,181	1,110	0·63	5,371	−4,261	38	44·87
1894	1,85,000	17,381	11,365	6·14	2,14,601	20,163	11,781	5·49	8,783	+2,998	42	38·35
1895	1,85,000	17,643	11,333	6·13	2,15,374	20,539	11,512	5·35	8,378	+3,134	42	40·17
1896	1,85,000	22,864	14,101	7·62	2,52,746	28,765	15,072	6·47	9,149	+5,923	57	49·59
1897	1,85,000	19,133	10,883	5·88	2,33,264	24,131	12,243	5·25	9,305	+2,938	48	46·55
1898	1,85,000	16,893	10,334	5·59	2,33,264	21,306	11,628	4·99	9,331	+2,297	43	42·50
1899	1,85,000	19,739	12,102	6·54	2,33,264	24,889	13,618	5·84	9,330	+4,288	50	42·37
1900	1,85,000	21,084	14,238	7·70	2,33,264	26,585	12,616	5·41	9,330	+3,286	53	43·66
1901	1,85,000	16,279	9,375	5·07	2,33,264	20,526	10,548	4·52	9,330	+1,218	41	45·87
1902	1,85,000	14,777	8,329	4·50	2,36,786	18,913	8,330	3·52	9,408	−1,078	37	47·01
1903	1,85,000	13,033	7,423	4·01	2,37,069	16,701	7,898	3·33	9,482	−1,584	33	48·67
1904	1,85,000	12,792	7,280	3·94	2,37,069	16,393	8,340	3·52	9,474	−1,134	32	46·48

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—

The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

The Maharaja Scindia lent the British Government seventy-five lakhs of rupees at 4 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway; but Government reserve the right to take back the line at any time.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
RAJPUTANA SECTION—			Miles.	Miles.		Miles.	
Main line—							
Delhi to Rewari	1-3-70	14-2-73	51·25				
Rewari to Alwar	14-8-72	15-9-74	46·25		1873	92	
Alwar to Bandikui		7-12-74	37·75		1874	329	
Bandikui to Dausa		20-4-74	17·75		1875	465	
Dausa to Jaipur	20-10-71	12-10-74	38·00		1876	535	
Jaipur to Phulera		1-3-75	34·25				
Phulera to Ajmer	9-4-73	1-1-75	49·75		1877	535	
Ajmer to Beawar		15-5-78	32·25		1878	632	
Beawar to Haripur		12-8-79	21·00		1879	753	
Haripur to Sojat Road	4-9-76	20-10-80	20·50		1880	911	
Sojat Road to Palanpur		1-1-81	148·00				
Palanpur to Ahmedabad		15-11-79	83·00		1881	1,256	
					1882	1,251	
Total main line, Rajputana section	...	...	579·75		1883	1,346	
					1884	1,609	
Branches on Rajputana section—					1885	1,667	
Farukhnagar Salt branch	1-3-70	14-2-73	7·75		1886	1,668	
					1887	1,668	
Agra branch—					1888	1,665	
Bandikui to Bharatpur	20-10-71	24-4-74	60·50				
Bharatpur to Agra Fort		11-8-73	34·14		1889	1,672	
Agra Fort to Jumna East bank		1-1-76	1·50		1890	1,672	
					1891	1,674	
			96·14		1892	1,674	
Sambhar Lake Salt branch	8-4-73	1-3-75	4·50		1893	1,674	
Japog extension	14-7-75	Oct. 76	4·50		1894	1,674	
Extension of Sambhar branch to Jhowra	15-5-78	20-12-79	17·00		1895	1,674	
Kankaroola siding	...	15-2-81	1·25		1896	1,674	
Additional salt sidings in the Sambhar lake	...	1-9-91	5·02				
					1897	1,674	
(5′ 6″ gauge.)			·27		1898	1,674	
					1899	1,669	
Jumna East bank to Agra Cantonment	...	1-1-76	3·07		1900	1,678	Of the 5′ 6″ gauge line between Jumna East bank and Agra Cantonment, the length on the Jumna bridge is of mixed (5′ 6″ and 3′ 3⅜″) gauge.
Lahori Gate Cabin to Brewery Cabin at Delhi	...	...	0·94				
					1901	1,648	
			4·01		1902	1,648	
					1903	1,649	
Total branches	..	...	140·17		1904	1,682	
TOTAL RAJPUTANA SECTION	...	...	...	719·92			
MALWA SECTION—							
Main line—							
Khandwa to Sanawad	8-1-72	1-2-74	34·25				
Sanawad to Mortakka		1-4-74	3·50				
Mortakka to Choral		20-1-75	20·50				
Choral to Mhow		1-1-78	15·69				
Mhow to Indore		3-8-76	13·00				
Indore to Fatehabad	29-10-73	3-8-76	25·23				
Fatehabad Junction to Rutlam		11-7-78	43·75				
Rutlam to Jaora		25-2-80	20·50				
Jaora to Mandsaur	5-10-77	8-4-80	31·75				
Mandsaur to Neemuch		2-7-80	30·25				
Neemuch to Nimbahera		10-3-81	16·46				
Nimbahera to Chitorgarh	30-4-79	19-3-81	17·65				
Chitorgarh to Nasirabad		1-12-81	100·65				
Nasirabad to Ajmer	14-4-74	14-2-76	14·15				
			392·27				
Total main line, Malwa section	...	...					
Branch on Malwa section—							
Ujjain branch—							
Fatehabad to Ujjain	29-10-73	3-8-76	12·00				
Ujjain branch extension across the Sipra river to Ujjain city.	6-12-82	1-3-84	2·88				Ujjain branch extension includes 2·10 miles, 5′ 6″ gauge, from Sipra Junction to station, which opened in 1899.
Total Branch	...	...	14·88				
TOTAL MALWA SECTION	...	...	...	407·15			
Carried over	...	...	...	1,127·07			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Remarks.
			Miles.	Miles.	
Brought forward	...	...	...	1,127·07	
CAWNPORE-ACHNERA SECTION—					
Main line—					
Cawnpore to Kanauj	13-10-78	15-12-80	49·51		
Kanauj to Farukhabad		1-2-81	36·50		
Farukhabad to Kasganj	13-7-82	14-4-84	67·00		
Kasganj to Hathras		1-7-81	34·00		
Hathras to Muttra	April 1874	19-10-75	29·00		
Jumna bridge	July 1882	1-7-84	1·00		
Muttra to Achnera	Feb. 1880	7-11-81	22·33		
Total main line, Cawnpore-Achnera section	...	...	239·34		
Branches on Cawnpore-Achnera section—					
Brahmavart branch	18-3-84	10-11-85	5·00		
Soron branch	16-3-83	4-1-85	9·00		
Brindaban branch	4-5-88	26-8-89	7·32		
Total branches	...	...	21·32		
TOTAL CAWNPORE-ACHNERA SECTION	...	...	...	260·66	
REWARI-BHATINDA-FAZILKA SECTION—					
Main line—					
Rewari to Hissar	13-9-81	20-3-83	89·00		Of the length between Sirsa and Kot Kapura, 26·28 miles, between Kot Kapura and Bhatinda, are of mixed (5′ 6″ and 3′ 3⅜″) gauge.
Hissar to Sirsa		1-4-84	50·50		
Sirsa to Kot Kapura	8-10-82	1-10-84	72·07		
Kot Kapura to Fazilka		1-1-85	50·00		
TOTAL REWARI-BHATINDA-FAZILKA SECTION	...	...	...	261·57	
REWARI-PHULERA CHORD—					
Rewari to Narnaul	20-12-01	10-12-04	32·55	32·55	
TOTAL OPEN MILEAGE, RAJPUTANA-MALWA RAILWAY	...	...	...	1,681·85	
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—		Probable date.			
REWARI-PHULERA CHORD—					
Narnaul to Phulera	20-12-01	1-1-06	100·60		
Total lines under construction	...	...	...	100·60	
GRAND TOTAL, RAJPUTANA-MALWA RAILWAY PROPER	...	...	...	1,782·45	
DOUBLE LINE, RAJPUTANA SECTION—					
Agra Fort to Agra Cantonment	...	11-8-73	1·14		
Second track at Delhi	...	25-12-02	1·78		
Total double line	...	...	2·92		

Details of construction—

Permanent-way.—The main line was laid originally with 36 lb. and 40 lb. flat-footed iron rails laid on transverse deodar and creosoted pine sleepers. The 36 lb. iron rails were replaced by 41¼ lb. flat-footed steel rails, 24 feet long. The whole has since been relaid with 50 lb. flat-footed steel rails, 30 feet long, except in some station yards. The creosoted half-round pine sleepers with which the road was first laid have been replaced by deodar sleepers. On the line from Cawnpore to Raya 41¼ lb. flat-footed steel rails, 24 feet long, are laid on deodar sleepers and from Raya to Achnera 50 lb. flat-footed steel rails, 30 feet long, on deodar sleepers. On the Rewari-Bhatinda-Fazilka line 41¼ lb. flat-footed steel rails, 24 feet long, are laid on deodar sleepers up to mile 204 and on Denham-Olpherts' plate sleepers for the remainder. On the Malwa section, from Ajmer to Rutlam, and Mortakka to Khandwa, the rails are mixed, 41¼ lb. steel and 40 lb. iron, 24 feet long, and from Rutlam to Mortakka the rails are 50 lb. steel, 30 feet long, except in station yards. On the Rewari-Narnaul section of the Rewari-Phulera Chord, the rails are 50 lb. flat-footed steel, 30 feet long, with a small percentage of 24 and 27 feet rails, laid on deodar sleepers, 9 to a 24 feet rail and 11 to a 30 feet rail.

Ballast.—The line is ballasted throughout with stone, kunkur or sand, and 1·63 miles, from mile 31 to Narnaul, with hard quartz.

Fencing.—The total length of line fenced on the Rajputana section is 660 miles, or about three-fourths of the whole section. The Malwa section is fenced for 93½ miles, including the ghats, between Mhow and Kalakhund, and at stations. The Cawnpore-Achnera section is fenced on both sides for 145½ miles on the main line, except for 7½ miles which are fenced on one side only. The Soron branch is fenced for 3½ miles and the Brindaban branch for 3½ miles. The Rewari-Bhatinda-Fazilka section is fenced for about 113½ miles and at stations. On the Rewari-Phulera Chord only the Narnaul station yard is fenced. The fencing used is wire fencing.

Curves.—The sharpest curve is of 600 feet radius. There are two such curves on the Malwa section, each 1,000 and 300 feet long at miles 325 and 325½ respectively.

Gradients.—The ruling gradient is 1 in 150, except on the Malwa section, between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patalpani where it is 1 in 40.

Terms of contracts—

The Rajputana-Malwa and Godhra-Rutlam-Nagda railways are worked together as one undertaking under the following contracts:—

Contracts of—24th September 1884, the original contract (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.

16th March 1888.—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway as a part of the Rajputana-Malwa railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 8}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3. (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

Terms of contracts—*contd.*

8th November 1889.—Contract supplemental to those of 1884 and 1888 for maintaining and working the Brindaban branch as a part of the Cawnpore-Achnera railway.

5th October 1893.—Supplemental to the original contract for maintaining and working the Godhra-Rutlam railway as a part of the Rajputana-Malwa railway.

1st October 1897.—Supplemental to those of 1884 and 1893 for maintaining and working the Rutlam-Nagda railway as a part of the Godhra-Rutlam railway.

1st February 1901.—Supplemental to those of 1884 and 1888 modifying the terms as to the division of working expenses.

The general conditions of the contracts are as follows :—

Government aid.—The line is the property of Government.

Currency of contracts.—The duration of the contracts is up to the 31st December 1905.

Power of company to surrender contracts.—Nil.

Terms of working.—The working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2′ and 2′ 6″ gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3′ 3⅜″ gauge, and Godhra-Rutlam-Nagda, 5′ 6″ gauge, railways, are paid in full to Government.

Rates and fares.—Maximum and minimum rates and fares have been fixed within which the Company is authorised to vary the rates.

Statistics of working—

TABLE I (including the Godhra-Rutlam-Nagda railway).

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	7,06,47,354	38,64,997	15,41,903	2·18	28,48,439	...	−13,01,536
1880	8,38,87,014	59,12,511	17,33,714	2·07	35,81,449	...	−18,47,735
1881	9,30,43,645	94,70,410	35,96,044	3·86	37,48,505	...	−1,52,461
1882	9,94,83,933	1,14,82,614	52,84,068	5·31	38,74,919	...	+14,09,749
1883	11,08,57,933	1,35,64,166	63,39,206	5·72	40,74,806	...	+22,64,400
1884	11,92,08,595	1,46,20,446	61,92,677	5·19	43,90,548	...	+18,02,129
1885	12,22,63,117	1,73,00,501	79,71,964	6·52	49,10,379	...	+30,61,585
1886	12,80,59,407	1,82,98,610	89,55,549	6·99	51,72,731	6,28,054	+31,54,764
1887	12,87,69,487	1,65,28,203	81,24,547	6·31	51,86,578	5,06,190	+24,31,779
1888	12,96,59,656	1,86,14,714	96,31,727	7·43	52,27,345	4,99,908	+39,04,474
1889	13,02,53,556	1,99,30,005	91,32,788	7·01	52,48,893	8,56,110	+30,27,785
1890	13,00,01,510	1,74,28,281	86,42,525	6·65	52,61,288	6,57,951	+27,23,236
1891	13,17,20,440	2,17,89,570	1,23,17,065	9·35	53,13,814	8,78,835	+61,24,386
1892	14,34,24,072	2,24,00,454	1,32,14,774	9·21	56,14,176	13,45,763	+62,54,835
1893	14,30,06,325	2,26,33,265	1,33,25,640	9·32	57,00,808	13,24,918	+62,99,914
1894	14,72,89,588	2,51,44,200	1,54,75,342	10·51	58,77,844	15,63,148	+80,34,350
1895	15,55,56,871	2,45,42,974	1,44,02,358	9·26	59,78,606	16,21,635	+68,02,117
1896	15,03,08,348	2,10,21,002	1,13,79,807	7·57	60,63,242	9,93,351	+43,23,214
1897	14,94,51,054	1,84,74,358	1,00,97,008	6·76	60,48,581	5,09,720	+35,38,707
1898	15,03,74,730	2,23,17,315	1,19,05,991	7·91	60,77,309	9,53,967	+48,74,715
1899	15,14,26,773	2,60,94,541	1,47,20,148	9·73	60,92,658	9,92,364	+76,45,126
1900	15,31,25,211	2,91,75,054	1,60,55,050	10·48	61,35,151	21,67,610	+77,52,289
1901	15,43,58,624	2,78,62,296	1,43,89,645	9·65	61,89,498	13,785	+86,86,362
1902	15,64,35,445	2,58,96,694	1,36,25,409	8·71	62,89,815	...	+73,45,094
1903	15,78,81,717	2,27,25,664	1,12,42,360	7·18	62,84,957	5,644	+50,51,759
1904	16,17,31,683	2,33,65,288	1,21,57,833	7·52	64,55,047	...	+57 02,786

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads } (a) \text{ to } (o)}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM**—*contd.*

3 (*k*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—*concld.*

TABLE II.

Calendar year.	Rajputana-Malwa, 3′ 3⅜″.		Holkar and Sindia-Neemuch, 3′ 3⅜″.		Western Rajputana, 3′ 3⅜″		Rewari-Ferozepore, 3′ 3⅜″.		Muttra-Hathras, 3′ 3⅜″.		Cawnpore-Farukhabad, 3′ 3⅜″.		Muttra-Achnera, 3′ 3⅜″.		Cawnpore-Achnera, 3′ 3⅜″.		Godhra-Rutlam-Nagda, 5′ 6″.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1873	32	96·59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	69	80·37	60	84·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	98	64·04	123	91·71	...	...	...	...	106	58·18	...	...	...	...	...	...	...	...
1876	114	65·40	99	92·37	...	...	...	...	55	57·74	...	...	...	...	...	...	...	...
1877	130	67·99	86	76·86	...	...	...	...	66	54·86	...	...	...	...	...	...	...	...
1878	136	61·97	122	67·50	...	...	...	...	65	53·33	...	...	...	...	...	...	...	...
1879	153	66·74	128	74·53	86	86·08	...	...	83	54·97	...	...	...	...	...	...	...	...
1880	152	66·88	118	74·74	151	85·79	...	...	99	57·35	18	283·15	...	...	...	...	...	...
1881	139	60·41	132	69·11	...	...	...	...	90	69·19	65	69·76	39	89·01	...	...	...	...
1882	138	53·07	...	...	...	...	...	...	84	76·97	80	67·36	57	86·42	...	...	...	...
									Included with Cawnpore-Achnera.									
1883	219	52·18	...	...	...	...	75	81·28	...	...	...	...	...	...	80	63·98	...	...
1884	223	56·92	...	...	...	...	96	67·28	...	...	...	...	...	...	81	69·17	...	...
1885	224	52·81	...	...	...	...	...	...	...	...	...	...	...	...	70	87·87	...	...
1886	212	50·27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	191	50·84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	215	48·26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	230	45·82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	200	50·41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	251	43·47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	257	41·01	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	259	41·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	41·61
1894	285	38·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	106	40·64
1895	269	46·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	184	57·61
1896	227	44·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	189	62·27
1897	212	46·60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146	72·02
1898	241	42·83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	181	51·14
1899	285	42·06	...	...	...	...	...	...	...	...	...	...	...	...	...	...	173	58·34
1900	317	43·18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	219	46·84
1901	313	46·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156	45·15
1902	291	47·54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140	46·27
1903	253	49·16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147	48·29
1904	260	47·63	...	...	...	...	...	...	...	...	...	...	...	...	...	...	158	47·62

3 (*l*) Vijapur-Kalol-Kadi railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Vijapur to Kalol	23-5-99	10-6-02	29·44		1902	29
Kalol to Kadi	29-3-01	13-7-03	11·93		1903	41
TOTAL	...	...	...	41·37	1904	41

Details of construction—

Permanent-way.—16 miles are laid with 41½ lb. flat-footed steel rails and 25 miles with 40 lb. flat-footed iron rails, 24 feet long, on deodar sleepers, 9 to a rail.

Ballast.—The Vijapur-Kalol section is ballasted with broken stone, 4 cubic feet per foot run except from mile 16·25 to 25 and all station yards which are laid with kunkur. Kalol-Kadi section is ballasted with shingle ballast only.

Fencing.—Only station yards and first 9·81 miles of the Vijapur-Kalol section are fenced with wire.

Curves.—The sharpest curve is of 3,820 feet radius, 3,351 feet long, at mile 1 on the Kalol-Kadi section.

Gradient.—The ruling gradient is 1 in 150.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*l*) Vijapur-Kalol-Kadi railway (3′ 3½″ gauge)—*concld.*

Terms of contracts—

The railway is the property of the Baroda state and is worked under the following—

Agreement of—23rd November 1903 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1899	7,534	...	...	...	...	...
1900	29,885	...	...	...	...	...
1901	6,60,716	...	...	...	...	...
1902	10,47,188	19,514	9,226	1·18	23	52·72
1903	11,84,246	56,916	28,782	2·43	31	49·43
1904	13,35,402	74,572	40,083	3·00	35	46·25

(3) (*m*) Gaekwar's Dabhoi railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Miyagam to Dabhoi	21-3-72	8-4-73	20·00		1873	
Dabhoi to Chandod	27-11-77	15-4-79	10·62		to	20
Dabhoi to Bahadarpur		17-9-79	9·64		1878	
Bahadarpur to Bodeli	Sept. 1888	16-6-90	12·77		1879	40
Dabhoi to Goya Gate	29-1-79	1-7-80	17·00		1880	57
Goya Gate to Vishvamitri		24-1-81	1·63		1881	60
Vishvamitri to Padra	28-8-95	1-7-97	7·14		1882	
Padra to Mobha	18-1-02	10-7-03	9·20		to	59
Mobha to Masor Road	24-1-03	1-11-04	6·49		1889	
TOTAL	...	...	...	94·49	1890 to 1896	72
					1897 to 1902	79
					1903	88
					1904	94

Details of construction—

Permanent-way.—The line was laid originally with 28 lb. flat-footed iron rails and 30 lb. and 31 lb. steel rails, 21 feet long, on half round jungle teak sleepers, 7 to a rail. The renewals are being made with 31 lb. flat-footed steel rails, 21 and 30 feet long, on half round jungle wood sleepers, 7 to a rail. There are still about 5 miles of 28 lb. iron rails to be renewed. The Vishvamitri-Masor Road section is laid with 31 lb. flat-footed steel rails, 21 feet long, on half round jungle teak sleepers, 7 to a rail.

Ballast.—The line is ballasted with sand. Small lengths, between miles 30 and 31, and 34 and 35, on the Miyagam-Bodeli section, on the Jambua bridge and between miles 7 and 8 on the Chandod-Masor Road section, are ballasted with stone.

Fencing.—The station yards between Padra and Masor Road and between Dabhoi and Bodeli have wire fencing. There is a bit of wire fence on one side between Vishvamitri and Goya Gate and at Karvan, also a little bit of palisade fence on the east of Miyagam and north and south of Dabhoi.

Curves.—The sharpest curve is of 500 feet radius, 1,156 feet long. There are two such curves, one at Vishvamitri and the other at Dabhoi.

Gradients.—The ruling gradient is 1 in 400, with small lengths of 1 in 200, between Padra and Vishvamitri, and 1 in 300, between Dabhoi and Bahadarpur.

Terms of contracts—

The line is owned by the Baroda state and worked under—

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

3 (*m*) Gaekwar's Dabhoi railway (2′ 6″)—*concld.*

Terms of contracts—*concld.*

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Baroda state.

Currency of agreement.—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working.—The Company work the railway at actual cost, *plus* 12½ per cent. of total working expenses (but not less than Rs. 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.

Rates and fares.—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I.					TABLE II.			REMARKS.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	
	Rs.	Rs.	Rs.			Rs.		
1879 . . .	9,62,450	72,083	31,608	3·28	1873	21	98·34	
1880 . . .	11,65,540	1,28,825	5·50		1874	32	75·78	
1881 . . .	12,57,448	1,41,233	48,849	3·88	1875	33	78·11	
1882 . . .	12,78,942	1,44,022	46,747	3·66	1876	38	75·35	
1883 . . .	12,73,630	1,46,970	38,585	3·05	1877	45	78·20	
					1878	48	62·42	
					1879	46	56·15	
1884 . . .	13,80,177	1,49,091	48,560	3·80	1880	51	49·44	
1885 . . .	13,11,229	1,52,283	55,623	4·24	1881	46	65·41	
1886 . . .	13,58,502	1,55,699	39,393	2·90	1882	47	67·54	
1887 . . .	13,46,259	1,56,352	47,339	3·52				
1888 . . .	13,74,295	1,45,757	43,854	3·19	1883	48	73·75	
					1884	49	67·43	
					1885	50	63·47	
					1886	50	74·37	
1889 . . .	16,10,898	1,42,989	49,398	3·07	1887	51	69·73	
1890 . . .	17,53,877	1,95,028	74,570	4·25				
1891 . . .	17,94,157	2,01,165	68,126	3·80	1888	48	69·91	
1892 . . .	18,47,403	3,38,609	1,06,510	5·77	1889	47	65·45	
1893 . . .	18,55,158	2,52,106	1,32,507	7·14	1890	57	61·76	
					1891	54	66·13	
					1892	64	55·36	
1894 . . .	18,88,774	2,40,316	95,429	5·05	1893	68	47·44	
1895 . . .	19,06,757	2,34,473	96,764	5·02	1894	65	60·29	
1896 . . .	20,74,756	2,58,788	1,25,657	6·06	1895	63	58·73	
1897 . . .	21,08,574	2,20,901	50,949	2·42	1896	69	51·44	
1898 . . .	21,18,491	2,10,240	−26,592	...	1897	56	76·94	
					1898	51	112·65	
					1899	60	64·40	
1899 . . .	21,17,586	2,45,974	87,571	4·14	1900	57	73·22	
1900 . . .	21,17,538	2,35,281	61,603	2·44	1901	62	71·03	
1901 . . .	21,14,202	2,53,936	73,427	3·47	1902	54	65·69	
1902 . . .	22,24,829	2,22,573	76,367	3·62				
1903 . . .	23,60,528	2,60,550	7,467	0·32	1903	60	97·13	The decrease in net earnings in 1903 was due principally to the cost of 3 engines having been charged to Revenue.
1904 . . .	24,64,832	2,98,906	1,36,426	5·13	1904	65	57·70	

(3) (*n*) Rajpipla railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Ankleswar to Raj-Pardi	Oct. 1894	1-7-97	19·03		1897	19
Raj-Pardi to Umalla	Feb. 1898	19-1-99	4·95		1898	1
Umalla to Amletha		1-6-99	7·85		1899 to 1904	37
Amletha to Nandod		20-7-99	55·4			
TOTAL .	...	...	...	37·37		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.***

3 (*n*) Rajpipla railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 41½ lb. flat-footed second-hand iron and steel rails, 24 feet long, with a small percentage of 21 feet rails, on half-round jungle teak sleepers, 8 to a 24 feet rail.

Ballast.—With the exception of 2¾ miles of gravel ballast, between miles 10 and 12¾, the line is ballasted with coarse river sand.

Fencing.—Only the station yards and small lengths at miles 4 and 9 are fenced with wire.

Curves.—The sharpest curve is of 1,432 feet radius, 1,802 feet long, between miles 0 and 1, 504 feet long, between miles 8 and 9 and 1,327 feet long, between miles 13 and 14.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The line is owned by the Rajpipla state and is worked under—

Agreement of—19th March 1900 between the Rajpipla state and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Rajpipla state.

Currency of agreement.—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side.

Terms of working.—The Rajpipla state is debited with the actual cost of working; and in addition one per cent. on the net earnings of the Rajpipla railway as contribution to the Provident Fund and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Rajpipla state; and to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	12,674	...	...	...	...	...
1895	77,265	...	...	...	...	...
1896	4,09,141	...	...	...	...	...
1897	7,55,792	5,705	—6,534	...	11	214·53
1898	11,03,333	10,624	—9,172	...	11	186·53
1899	13,07,820	35,809	8,478	0·65	22	76·32
1900	13,10,159	49,463	12,139	0·93	25	75·46
1901	13,06,822	47,182	10,487	0·80	24	77·77
1902	13,05,415	38,726	10,131	0·78	20	73·84
1903	13,04,281	44,830	10,674	0·82	23	76·19
1904	13,04,522	49,207	16,890	1·29	25	65·68

3 (*o*) Jaipur (Siwai-Madhopur) railway (3′ 3¾″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sanganer to Siwai-Madhopur in the Jaipur state	2-12-97	...	72·85	72·85

The line, which is the property of the Jaipur state, had been partially constructed, when work was suspended for want of funds in 1901. Work is expected to be resumed in 1905. It has been proposed that the line, when completed, should be worked by the Bombay, Baroda and Central India Railway Company.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM.**

Lines comprising system.—The Eastern Bengal (State) railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Eastern Bengal (State) railway, Eastern and Southern sections (5′ 6″ gauge)	278·68	105·75	384·43
(*b*) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (5′ 3⅜″ gauge)	637·60	300·87	938·47
(*b*) " " " " , Ranaghat-Krishnagar and Teesta-Kurigram branches and British section of the Santrabari Extension (2′ 6″ gauge)	55·03	...	55·03
(*c*) Mymensingh-Jamalpur-Jagannathganj railway (5′ 3⅜″ gauge)	51·37	...	51·37
(*d*) Cooch Behar railway (2′ 6″ gauge)	33·60	...	33·60
	1,056·28	406·62	1,462·90

Running powers—

Foreign lines over home line :—

East Indian railway,	Naihati to Brace Bridge Junction	for goods trains only	32·75
	Canal Junction to Chitpore		1·75
Bengal Central railway,	Dum Dum Junction to Canal Junction	for passenger and goods trains	1·61
" " "	Canal Junction to Calcutta		2·96
" " "	Canal Junction to Chitpur	for goods trains only	1·75
" " "	Calcutta to Kidderpore Docks		8·25
			49·07

The line from Calcutta to Port Canning, which was the property of the Calcutta and South Eastern Railway Company, was purchased by the State on the 1st April 1868. The line from Calcutta to Goalundo was also purchased by the State from the Eastern Bengal Railway Company on the 1st July 1884; and on the same date the existing branch line from Poradaha to Damukdia was permanently amalgamated therewith. From the 1st April 1887 the Calcutta and South Eastern railway, the Eastern Bengal railway with the branch to Damukdia, the Northern Bengal (Sara to Siliguri, Parbatipur to Kaunia, Parbatipur to Dinagepore), the Kaunia-Dharlla (Kaunia to Jatrapore and Mogalhat), the Dacca (Narayanganj to Mymensingh) and the Assam-Behar (Manihari to Kasba) railways were amalgamated, and have been worked as one system known as the Eastern Bengal (State) Railway system.

The line from Santahar to Fulchhari which was constructed and worked by the Eastern Bengal (State) railway on behalf of the Brahmaputra-Sultanpur Branch Railway Company has been purchased by the State and amalgamated with the 3′ 3⅜″ gauge section of the system from the 1st April 1904. The property of the Ranaghat-Krishnagar Light Railway Company has been purchased by the State and included in the 2′ 6″ gauge section of the system from the 1st July 1904.

The Kaunia-Dharlla branch was constructed by the Bengal Government out of Provincial revenues. The portion from Kaunia to Mogalhat has been converted from 2′ 6″ to 3′ 3⅜″ gauge and extended to Dhubri on the Brahmaputra river. At Dhubri a connection is made with the Assam steamer services run by the India General and River Steam Navigation Company. The Dacca section is connected with the Eastern section by a ferry worked by the India General Steam Navigation Company between Goalundo and Narayanganj ghat.

The Northern and Eastern sections are connected by a steam ferry worked by the railway between Sara ghat and Damukdia ghat.

The East Indian railway is connected with the Bengal system of railways by a ferry worked by the East Indian railway across the Ganges between Manihari and Sahebgunge. A branch line runs northwards from Katihar Junction through Purneah and Kasba to Debiganj. The line from Debiganj to Ancheraghat on the Kosi opposite Khanwa ghat on the Kosi extension of the Tirhoot railway has been abandoned. The Eastern Bengal (State) railway is also connected with the Bengal and North-Western railway at Katihar.

4 (*a*) Eastern Bengal (State) railway, Eastern and Southern sections (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
EASTERN SECTION—			Miles.	Miles.		Miles.
Main line—						
Calcutta to Ranaghat	16-4-59	29-9-62	45·25		1862	122
Ranaghat to Jagati Junction		15-11-62	62·00		1863	125
Jagati Junction to 145th mile	1865-66	1-1-71	37·82		1864	139
					1865	139
Total main line	...	...	...	145·07	1866	139
Branches—						
Jagati Junction to river Ganges (*Kooshtea branch*)	...	16-2-64	3·77		1867	139
Kooshtea loop line	...	1-8-81	1·17		1868	139
Canal Junction to Chitpore (*Chitpore branch*)	12-4-73	25-8-73	1·88		1869	139
Portion in Chitpore yard for goods traffic	...	13-4-88	0·12		1870	139
Panchooria Junction to new Goalundo	...	22-10-93	6·88		1871	184
Mile 145 to Panchooria Junction	...	1-1-90	3·16			
Panchooria Junction to Shivarampur	Feby. '97	20-10-98	8·77		1872	184
Shivarampur to Faridpur		9-4-99	7·43		1873	186
Belgachhi to the Ganges	Feby. '96	27-10-98	2·30		1874	186
Bhydea Junction to Borat	...	7-6-97	3·17		1875	186
Churni Extension	...	1-1-02	1·50		1876	186
Extensions to Chitpore Terminus (Belgachhi to Cossipore)	Mar. '01	1-3-03	0·68			
		1-9-03	0·98		1877	186
Poradaha branch—					1878	186
Poradaha to Bhairamara	4-4-76	19-1-78	11·79		1879	186
Bhairamara to Golabnuggur (Damukdia)	22-9-83	8-12-83	7·41		1880	196
Golbathan Extension	...	1-1-02	2·28		1881	187
Total branches	...	...	...	62·79	1882	203
					1883	216
TOTAL, EASTERN SECTION, CARRIED OVER	...	...	...	207·86	1884	233

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$ · **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

4 (a) Eastern Bengal (State) railway, Eastern and Southern sections (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Brought forward, total Eastern section	...	...	...	207·86		
SOUTHERN SECTION—						
Main line—						
Calcutta to Champahati	...	2-1-62	15·00		1885	235
					1886	235
Champahati to Port Canning	...	15-5-63	12·79		1887	235
					1888	231
Junction with Eastern section	...	15-8-85	0·41		1889	231
Bansra diversion	Jan. 1900	5-3-00	0·25			
Bansra diversion extension	...	17-11-02	0·75			
					1890	249
Total main line	...	...	...	29·20	1891	248
					1892	248
Branches—					1893	249
Diamond Harbour branch—					1894	249
Sonarpur to Baruipur	9-9-80	10-6-82	5·30			
Baruipur to Magra Hat		18-12-82	9·55			
Magra Hat to Diamond Harbour	...	25-4-83	12·69			
Diamond Harbour towards Hara Fort	...	25-4-83	0·42		1895	249
			27·96		1896	249
					1897	254
Budge Budge branch—					1898	263
Ballygunge to Budge Budge	Nov. '88	1-5-90	13·66		1899	268
Total branches	...	...	...	41·62		
					1900	268
TOTAL, SOUTHERN SECTION	...	...	...	70·82	1901	268
					1902	277
TOTAL OPEN MILEAGE, EASTERN AND SOUTHERN SECTIONS	...	...	...	278·68	1903	279
					1904	279
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Eastern section—		Probable date.				
Panchooria Junction to river Ganges (constructed but not opened)	12-2-96	...	6·00			
Kankurgachi Chord (Kankurgachi to Gobra)	19-2-02	30-6-06	2·25			
Ranaghat to Murshidabad	20-6-02	15-4-05	75·00			
Murshidabad to Jeaganj	23-9-03		6·00			
Jeaganj to Lalgola	23-9-03	31-7-05	16·50			
TOTAL LINES UNDER CONSTRUCTION	...	...	...	105·75		
GRAND TOTAL, 5′ 6″ GAUGE	...	...	...	384·43		
DOUBLE LINE, EASTERN AND SOUTHERN SECTIONS, OPEN—						
Calcutta to Naihati	July '84	1-8-86	23·23			
		21-3-87	0·26			
Naihati to Kanchrapara	May '91	20-4-92	4·69			
Kanchrapara to Ranaghat	Oct. '91	12-11-92	17·56			
Ranaghat to Aranghata		7-8-97	5·50			
Aranghata to Bogoola		17-9-97	6·75			
Bogoola to Shibnibash	Dec. '95	3-11-97	6·65			
		17-11-98	0·75			
Shibnibash to Ramnagar		17-9-97	9·50			
Ramnagar to Poradaha		7-8-97	27·58			
Canal Junction to Chitpore		13-4-88	1·88			
Sealdah to Ballygunge	July '86	20-10-88	3·50			
Ballygunge to Dock Junction	Nov. '89	19-9-90	0·36			
		20-11-93	4·00			
TOTAL DOUBLE LINE, OPEN	...	...	112·21			
QUADRUPLE LINE, UNDER CONSTRUCTION—						
Kankurgachi to Dum Dum Junction	...	...	2·99			

Details of construction—

Permanent-way.—The permanent-way on the double line portion of the Eastern section consists of 73 and 75 lb. double-headed steel rails, the former 30 and the latter 40 feet long, with Denham-Olpherts' cast iron sleepers 12 and 15, respectively, to the rail. This portion is being relaid, at the rate of 13 miles annually, with 85 lb. bull-headed steel rails, 40 feet long, with sal and jarrah sleepers at the joints. 29 miles have already been, and 23 miles between Naihati and Calcutta are being, so relaid.

The single line portion of the Eastern section is also laid with 73 and 75 lb. double-headed steel rails, 30 and 40 feet long, respectively, the greater part on Denham and Olpherts' cast iron sleepers, the remainder on cast iron bowl and sal wood sleepers, 12 and 15 to the rail, except on the Faridpur branch which is laid with 68 lb. double-headed iron rails, 20 feet long, on sal and pyinkado sleepers 8 to the rail; the Pachooria-Goalundo section which consists of 72 lb. double-headed iron rails, 20 and 23 feet long, on sal sleepers 8 to the former and 9 to the latter; and the Damukdia-Damukdia Ghat section (on which there are two separate lines, one for coaching and the other for goods) which is laid with 72 lb. double-headed iron rails and 73 lb. double-headed steel rails, each 20 feet long, on sal sleepers 8 to the rail.

On the double line portion of the Southern section, and on the Budge Budge branch, the rails are 73 lb. double-headed steel, 30 feet long, on Denham and Olpherts' cast iron sleepers 12 to the rail.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

4 (*a*) Eastern Bengal (State) Railway, Eastern and Southern sections (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

The single line of the Southern section consists of 72 and 73 lb. double-headed iron and steel rails, 23 and 30 feet long, mostly on Denham and Olpherts' cast iron sleepers, and the remainder on sal and cast iron pot sleepers, 9 to the 23 and 12 to the 30 feet rail. The iron rails are being relaid with 73 lb. steel rails, 30 feet long.

The Diamond Harbour branch is laid with 64 and 73 lb. double-headed steel rails, 30 feet long, on Denham and Olpherts' cast iron sleepers 12 to the rail, except for a short length near the harbour which has sal sleepers.

Ballast.—The line is ballasted throughout with brick ballast. Where 85 lb. bull-headed rails have been laid, brick ballast has been replaced by stone and it is intended to stone ballast all track laid with 85 lb. rails. The Faridpur branch is ballasted only at bridge approaches. Portions of the line between Panchooria Junction and Goalundo and Damukdia and Damukdia ghât are not ballasted. The Southern section from Sonarpur to Canning is not fully ballasted.

Fencing.—The Eastern section including the Kooshtea loop is fenced as far as Panchooria Junction with iron posts and five wires. On the Damukdia branch most of the fencing consists of stone posts with 4 wires, the remainder consists of sâl posts with 4 wires and iron posts with 5 wires. The line between Panchooria Junction and Goalundo and the Faridpur branch is unfenced. The southern section is fenced as far as Sonarpur with iron posts and 5 wires, beyond Sonarpur to Canning there is no fencing. The Diamond Harbour branch is fenced with stone posts and 4 wires. The Budge Budge branch is fenced with iron posts and five wires.

Curves.—The sharpest curve is of 1,000 feet radius and occurs at mile 120 near Damukdia station.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts.—Nil. The line is owned and worked by the State.

Statistics of working.—See page 129.

4 (*b*) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Northern section—			Miles.	Miles.		Miles.
Main line—						
Sara to Atrai	12-2-74	19-1-78	33·75			
Atrai to Jalpaiguri		28-8-77	134·25		1877	134
Jalpaiguri to Siliguri		10-6-78	28·85		1878	232
					1879	244
					1880	244
Total main line	...	...	196·85		1881	246
Branches—						
Brahmaputra-Sultanpur branch—					1882	246
					1883	256
Santahar to Bogra	Oct. '96	1-4-99	24·50		1884	249
Bogra to Dewantolah		5-4-00	22·02		1885	334
Dewantolah to Bonarpara		1-8-00	4·60		1886	334
Bonarpara to Fulchhari		1-9-00	8·25			
					1887	373
			59·37		1888	405
					1889	478
					1890	478
					1891	492
Rungpore branch—						
Parbatipur Junction to Shampur	...	19-5-78	15·25			
Shampur to Rungpore	12-2-74	2-7-78	7·50			
Rungpore to Kaunia	...	1-6-79	11·25		1892	527
					1893	527
					1894	527
			34·00		1895	528
					1896	528
Dinagepore branch—						
Parbatipur to Chirir bandar	22-11-81	1-7-83	2·92			
Chirir bandar to Dinagepore		16-5-84	8·75		1897	527
					1898	527
					1899	527
			18·67		1900	528
					1901	545
Teesta bridge at Kaunia and approaches	6-3-97	1-4-01	4·42			
Total, branches	...	...	116·46		1902	586
					1903	584
Total, Northern section	...	...	...	313·31	1904	638
Behar section—						
Main line—						
Manihari to Katihar	...	1-4-87	14·07			
Katihar to Rayganj	...	1-7-89	37·49			
Rayganj to Dinagepore	...	15-2-88	32·93			
Junction with the Bengal and North-Western railway at Katihar	...	8-3-01	0·69			
Total main line	...	...	84·93			
Total Carried over	...	...	84·93	313·31		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$ **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

4 (*b*) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3' 3⅜" gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Remarks.
			Miles.	Miles.	
Brought forward	...	...	84·93	313·31	
Behar section—*concld.*					
Branches—					
Kosi branch—					
Katihar to Kasba	...	1-4-87	22·10		
Kasba to Forbesganj	...	1-7-89	36·81		
Forbesganj to Debigunj	...	1-1-91	8·40		
			67·31		The Kosi branch originally extended up to Ancharaghat, 6·59 miles from Debigunj, but owing to the damage done to it by the Kosi river, the length beyond Debigunj has been abandoned.
Barsoi-Kissengunge branch—					
Barsoi to Kissengunge	June '91	15-12-92	35·11		
Total branches	...	...	102·42		
Total, Behar section	...	...	...	187·35	
Dacca section—					
Narayanganj ghat to Dacca	11-8-82	4-1-85	10·25		
Dacca to Jaydebpur		1-8-85	19·65		
Jaydebpur to Gafargaon		1-8-85	32·50		
Gafargaon to Mymensingh		1-8-85	23·52		
Total, Dacca section	...	...	...	85·92	The line between Teesta junction and Mogalhat was originally sanctioned and opened as a part of the Kaunia-Dharlla (2' 6" gauge) branch on 20th November 1875 and 6th February 1882, respectively.
Kaunia-Dhubri section—					
Teesta Junction to Mogalhat	Sept. '99	1-4-01	12·50		
Mogalhat to Gitaldaha Junction		2-1-02	1·86		
Gitaldaha Junction to Dhubri		23-9-02	36·66		
Total, Kaunia-Dhubri section	...	...	...	51·02	
Total mileage open, Eastern Bengal State Railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3' 3⅜" gauge).	...	...	...	637·60	
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					
Northern section—		Probable date.			
Dhubri-Gauhati extension—					
Golakganj to Salmara Road	31-10-02	Jany. '07	55·00		
Salmara Road to the Brahmaputra opposite Gauhati		...	96·62		
Kaunia-Bonarpara extension—					
Kaunia to Bonarpara	17-7-03	June 1905	44·25		
Katihar-Godagari extension—					
Katihar to Malda	8-7-04	June 1907	53·00		
Malda to Godagari		...	52·00		
Total lines under construction	...	...	...	300·87	
Grand total (3' 3⅜" gauge)	...	...	...	938·47	

Details of construction—

Permanent-way.—The permanent-way consists chiefly of flat-footed steel rails, weighing 50 and 41¼ lbs. per yard, on sâl sleepers. On the Northern section, Saidpur to Siliguri, the rails are 50 lb. and in lengths of 20, 30 and 40 feet, laid on 9, 12 and 15 sleepers, respectively. On the Brahmaputra-Sultanpur branch the rails are 50lb., 40 feet long, on 15 sleepers. On the Behar section, Manihari ghat to Dhubri, the greater part of the rails are 50 lb, 40 feet long, on 15 sleepers and the remainder are 41¼ lb., 24 feet long, on 9 sleepers, but these latter are being replaced by 50 lb. rails, except on the portions Katihar Junction to Manihari ghat and Golakganj Junction to Dhubri, which it is not intended to relay. On the Kosi branch and the Dacca section the rails are all 41¼lb., 24 feet long, on 9 sleepers. On the Barsoi-Kissengunj branch the rails are mostly flat-footed iron, 40 lb. per yard, the remainder being 41¼ lb. steel, all 24 feet long, the iron rails are being steadily replaced by steel ones; the sleepers are mostly sal, 9 per rail, but there are also metal sleepers of various types.

Ballast.—The whole of the line, except the portion from Golakganj Junction to Dhubri is ballasted or shortly to be ballasted. The ballast is for the most part brick, but small proportions are ballasted with stone and a fairly large proportion with shingle. No brick ballast is being manufactured now, shingle and stone ballast only will be used hereafter.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98].

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$, **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

4 (*b*) Eastern Bengal (State) railway, Northern, Behar, Dacca, and Kaunia-Dhubri sections (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Fencing.—The whole of the 3′ 3⅜″ gauge lines are fenced except the Brahmaputra-Sultanpur and Barsoi-Kissengunge branches, and the portions from Golakganj Junction to Dhubri and Dacca to Mymensingh. Most of the fencing consists of stone posts with 4 wires, the remainder is of iron posts and 5 wires.

Curves.—The sharpest curve is of 1,416 feet radius and occurs at mile 194, between Sonaili and Katihar stations.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—See pages 129 and 130.

4 (*b*) Eastern Bengal (State) railway, Ranaghat-Krishnagar and Teesta-Kurigram branches and the British section of the Santrabari extension (2′ 6″ gauge)—

The Teesta-Kurigram branch was originally a portion of the 2′ 6″ gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dharlla branch. The line from Teesta Junction to Mogalhat has been converted to the 3′ 3⅜″ gauge to form an integral part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned. The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal (State) railway system from 1st July 1904.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Ranaghat-Krishnagar branch—			Miles.	Miles.		Miles.
Aistalaghat (Right bank of the Churni river) near Ranaghat to Krishnagar	Dec. '95	5-4-99	20·25	...	1881	21
TOTAL, RANAGHAT-KRISHNAGAR BRANCH	...	...	...	20·25	1882	34
Teesta-Kurigram branch—					1883	32
Teesta Junction to Kurigram	...	18-7-81	14·99		1884 to 1899	37
TOTAL, TEESTA-KURIGRAM BRANCH	...	...	...	14·99		
Santrabari extension of the Cooch Behar State railway (British section)—					1900	47
South bank of Kaljani river to Alipur Duar	Dec. '97	18-1-00	0·64		1901	41
Alipur Duar to Raja Bhat Khawa		5-4-00	9·97		1902	35
Raja Bhat Khawa to Jainti		1-2-01	9·18		1903	35
TOTAL, SANTRABARI EXTENSION OF THE COOCH BEHAR STATE RAILWAY (BRITISH SECTION)	...	...	...	19·79	1904	55
GRAND TOTAL (2′ 6″ GAUGE)	...	...	...	55·03		

Details of construction—

Permanent-way.—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25 lb. per yard, 24 feet long; and the sleepers are 10 pyinkado to a rail on the former and 9 sal on the latter. On the Santrabari extension the rails are flat-footed iron, 40 lb. per yard, for about 12 miles and flat-footed steel, 41¼ lb. per yard, for the remainder, all 24 feet long and laid on sâl sleepers, 9 to a rail.

Ballast.—The Ranaghat-Krishnagar branch is brick ballasted; the Teesta-Kurigram branch is not ballasted; and the Santrabari extension is now being ballasted with stone.

Fencing.—No lines on the 2′ 6″ gauge are fenced.

Curves.—The sharpest curve is of 500 feet radius; there are three such curves on the Teesta-Kurigram branch.

Gradients.—No grade on the Ranaghat-Krishnagar and Teesta-Kurigram branches exceeds 1 in 200. On the Santrabari extension the ruling gradient is 1 in 100; and there is a short grade of 1 in 50, 0·37 mile long, near the terminus (Jainti).

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—See pages 129 and 130.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads } (a) \text{ to } (d)}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

4 (*a*) and (*b*) Eastern Bengal (State) railway (5′ 6″, 3′ 3⅜″ and 2′ 6″ gauge sections)—*contd.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	6,23,44,476	60,22,272	25,79,314	4·14	28,51,165	...	2,67,326	—6,39,177	
1880	6,39,72,354	66,91,060	33,75,186	5·33	29,27,692	...	5,34,950	—87,456	
1881	6,39,51,905	75,05,736	42,86,406	6·70	28,50,923	...	3,24,125	+6,11,359	
1882	6,50,12,346	85,79,404	47,17,459	7·26	27,92,607	...	8,95,329	+10,29,523	
1883	7,01,35,023	80,73,465	47,10,716	6·70	29,48,783	...	4,96,223	+12,63,710	
1884	6,58,68,060	78,12,979	24,80,526	3·77	15,92,486	3,50,920	...	+5,37,120	
1885	7,31,60,273	72,88,916	25,25,336	3·45	21,82,794	7,22,920	...	—3,80,378	
1886	8,00,56,752	82,73,918	30,89,720	3·86	24,94,239	19,04,750	...	—12,49,269	
1887	8,11,53,166	94,30,399	45,04,782	5·55	41,71,008	14,90,152	...	—11,56,378	
1888	8,59,09,629	1,05,19,210	55,25,424	6·44	29,83,744	20,11,011	...	+6,30,669	
1889	8,79,71,516	1,11,76,674	61,91,625	7·04	30,18,703	20,43,953	...	+11,28,969	
1890	10,00,68,626	1,14,78,382	60,70,323	6·07	30,96,150	18,14,110	...	+11,60,063	
1891	10,21,46,023	1,26,75,440	65,32,100	6·33	33,97,743	17,51,621	...	+13,82,736	
1892	10,60,47,429	1,15,56,446	62,33,727	5·88	36,86,181	16,53,922	...	+6,93,624	
1893	10,68,29,000	1,20,51,147	66,35,138	6·21	39,53,310	16,49,185	...	+10,32,643	*Represents payment made to the Brahmaputra-Sultanpur Branch Railway Company up to 1st April 1904, on account of surplus profits and other adjustments.
1894	10,75,52,685	1,40,15,726	83,58,559	7·78	41,01,624	18,91,850	...	+23,60,035	
1895	10,71,92,132	1,45,09,739	89,74,474	8·37	41,50,415	18,72,565	...	+29,51,494	
1896	10,97,80,613	1,50,81,670	90,02,286	8·20	41,06,132	17,56,150	...	+31,40,004	
1897	11,47,69,205	1,47,62,233	80,60,612	7·02	42,80,508	16,53,278	...	+21,26,831	
1898	11,78,54,619	1,47,17,879	83,55,064	7·07	43,89,356	15,75,020	...	+23,70,688	
1899	12,16,49,777	1,56,12,436	89,01,083	6·82	45,00,276	15,62,391	...	+22,38,416	
1900	12,58,52,617	1,71,00,460	92,46,424	7·35	47,02,516	15,66,769	...	+29,77,139	
1901	13,19,95,226	1,65,99,440	83,08,281	6·29	41,11,665	23,37,123	...	+18,59,493	
1902	13,99,82,381	1,78,93,098	91,48,340	6·54	44,25,883	23,29,895	...	+23,92,562	
1903	14,91,79,763	1,81,52,429	88,57,094	5·94	47,10,967	23,33,377	...	+18,12,850	
1904	15,89,94,505	1,94,63,098	88,23,872	5·55	50,60,898	23,33,925	*33,597	+13,94,952	

TABLE II.

Calendar year.	4 (*a*) Eastern and Southern sections.				4 (*b*) Northern, Behar and Dacca sections.							
	Eastern and Southern sections (5′ 6″ gauge).		Calcutta and South-Eastern section (5′ 6″ gauge).		Northern Bengal (State) (3′ 3⅜″ gauge).		Kaunia-Dharlla (2′ 6″ gauge).		Northern, Behar and Kaunia-Dhubri sections including the Teesta-Kurigram branch and the British section of the Santrabari extension (3′ 3⅜″ and 2′ 6″ gauges).		Dacca section (3′ 3⅜″ gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1862	94	55·59	36	128·39	...	...	...	...	...	...	...	...
1863	149	48·43	38	131·07	...	...	...	...	...	...	...	...
1864	176	53·67	53	137·03	...	...	...	...	...	...	...	...
1865	233	48·98	75	114·32	...	...	...	...	...	...	...	...
1866	243	51·05	79	118·59	...	...	...	...	...	...	...	...
1867	279	48·71	64	133·60	...	...	...	...	...	...	...	...
1868	308	46·33	60	173·12	...	...	...	...	...	...	...	...
1869	313	50·29	55	145·54	...	...	...	...	...	...	...	...
1870	335	55·69	55	104·88	...	...	...	...	...	...	...	...
1871	270	56·01	40	90·82	...	...	...	...	...	...	...	...
1872	344	66·60	40	92·07	...	...	...	...	...	...	...	...
1873	377	49·08	70	102·56	...	...	...	...	...	...	...	...
1874	433	52·18	68	78·35	...	...	...	...	...	...	...	...
1875	356	62·16	71	80·48	...	...	...	...	...	...	...	...
1876	401	43·66	68	108·62	...	...	...	...	...	...	...	...
1877	529	41·07	79	81·74	20	140·29	...	...	...	...	...	...
1878	512	43·71	83	75·08	61	75·31	...	...	...	...	...	...
1879	494	45·97	92	66·44	101	99·96	...	...	...	...	...	...
1880	540	44·81	98	71·23	114	60·10	...	...	...	...	...	...
1881	621	40·91	104	66·43	137	51·23	...	...	...	...	...	...
1882	611	40·60	130	97·42	160	49·04	25	92·97	...	...	...	...
1883	466	50·14	109	54·97	169	49·20	33	81·49	...	...	...	...
1884	422	54·06	Included with Eastern and Southern sections.		156	69·93	39	78·26	...	...	...	...
1885	380	61·25			153	70·16	31	107·29	...	...	47	141·12
1886	403	61·97			189	52·85	29	122·87	...	...	56	111·47
1887	268	52·23			Included with Eastern and Southern sections.				Included with Eastern and Southern sections.			
1888	546	47·47	...	...								
1889	563	44·60	...	...								
1890	521	47·12	...	...	...	...	...	...	181	55·48	93	62·10
1891	562	43·61	...	...	...	...	...	...	165	47·32	85	64·40
1892	562	44·32	...	...	...	...	...	...	182	45·17	96	62·41
1893	529	43·74	...	...	...	...	...	...	191	39·14	112	54·46
1894	621	40·33	...	...	...	...	...	...	199	40·29	120	51·49
1895	649	35·97	...	...	...	...	...	...	212	40·04	115	53·27
1896	676	39·74	...	...	...	...	...	...	195	42·44	114	55·92
1897	678	46·48	...	...	...	...	...	...	201	44·68	129	51·68
1898	652	41·86	...	...	...	...	...	...	218	43·21	131	55·78
1899	649	40·30	...	...	...	...	...	...	245	42·14	146	58·83
1900	689	47·75	...	...	...	...	...	...	225	46·91	157	65·12
1901	678	50·89	...	...	...	...	...	...	235	48·65	146	62·12
1902	728	48·18	...	...	...	...	...	...	239	50·14	144	78·25
1903	707	50·27	...	...	...	...	...	...	233	55·09	145	67·62
1904	751	53·14	...	...	...	...	...	...				

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd.***

4 (*a*) and (*b*) Eastern Bengal (State) railway (5′ 6″, 3′ 3⅜″ and 2′ 6″ gauge sections)—*concld.*

Statistics of working—*concld.*

The tables below show the statistics of working of the Brahmaputra-Sultanpur and Ranaghat-Krishnagar branches before they were purchased by the State.

Brahmaputra-Sultanpur (3′ 3⅜″ gauge) branch.

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1897 . .	2,02,919	...	...	...	...	...	...	...	...	Net earnings during 1899 and 1900 were paid over to the company and interests up to 1900 were charged to capital.
1898 . .	12,55,457	...	...	...	...	...	...	...	...	
1899 . .	19,58,137	36,900	...	...	...	...	...	38	45·00	
1900 . .	24,20,811	1,36,587	...	...	...	...	...	58	45·00	
1901 . .	23,27,619	1,96,848	61,875	2·17	42,414	...	+18,961	64	45·00	
1902 . .	29,17,993	2,40,424	1,32,233	4·53	86,750	9,480	+36,003	78	45·00	
1903 . .	29,42,486	2,54,379	1,39,908	4·75	88,185	23,742	+28,981	82	45·00	
1904 . .	Amalgamated with the Eastern Bengal (State) railway.									

Ranaghat-Krishnagar (2′ 6″ gauge) branch.

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	7,22,369	...	...	...	...	...	...	...	...
1899	7,27,809	46,348	8,415	1·16	12,352	20,767	2·85	59	81·84
1900	7,51,809	69,302	19,442	2·59	9,472	28,914	3·85	66	71·95
1901	7,51,157	69,117	15,185	2·02	1,465	16,650	2·22	66	78·03
1902	7,51,158	76,180	21,353	2·84	15,960	37,313	4·97	72	71·97
1903	7,43,657	86,484	33,832	4·55	5,674	39,506	5·31	82	60·86
1904 . . . . . 1st half	...	40,861	12,160	...	2,876	15,036	...	...	...
1904 . . . . . 2nd half	...	...	Amalgamated with the Eastern Bengal (State) railway.					...	...

4 (*c*) Mymensingh-Jamalpur-Jagannathganj Branch railway (3′ 3⅜″ gauge)—

This line which terminates on the Brahmaputra river is connected with the Eastern Bengal (State) Railway at Goalundo by the India General Steam and River Steam Navigation Companies' steamer services.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mymensingh to Singhjani	Novr. '96	15-10-98	33·07		1898	33
Singhjani to Jagannathganj	Novr. '96	15-10-99	18·30		1899 to 1903	53
Total	...	...	...	51·37	1904	51

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lb. to the yard, 40 feet long, laid on sâl sleepers, 15 to a rail.

Ballast.—The line is ballasted throughout with brick.

Fencing.—The line is fenced only at stations and through the town of Mymensingh, with iron posts and 5 wires.

Curves.—The sharpest curve is of 2,864 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts—

The Mymensingh-Jamalpur-Jagannathganj Branch railway is worked under the following contracts :—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj Branch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj Branch railway office from Calcutta to London.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$ **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

4 (*c*) Mymensingh-Jamalpur-Jagannathganj Branch railway (2′ 3½″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions of the contracts are as follows :—

Government aid.—Government in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal (State) railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal (State) railway system and this railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land has also been provided free of charge.

Currency of contracts.—Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of any subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, but not exceeding by more than 20 per cent., or not being less than, the total capital expenditure ; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—After deduction of 45 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fares.—To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal State railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from E. B. S. Ry.	Total income.	Percentage on capital outlay.	Table II. Earnings per mile per week.	Pro : of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	1,950	...	...	...	...	...	...	...	...
1897	5,54,688	...	...	...	...	...	...	...	...
1898	10,44,638	7,660	4,213	0·40	...	4,213	0·40	27	45·00
1899	16,11,248	66,490	36,575	2·27	...	36,575	2·72	35	45·00
1900	18,78,395	1,62,028	89,116	4·74	...	89,116	4·74	58	45·00
1901	20,84,346	1,67,736	92,365	4·43	...	92,365	4·43	60	45·00
1902	22,85,677	2,05,251	1,12,888	4·94	...	1,12,888	4·94	74	45·00
1903	22,01,173	2,22,825	1,24,993	5·68	...	1,24,993	5·68	82	45·00
1904	23,51,113	2,21,168	1,24,312	5·29	...	1,24,312	5·29	81	45·00

4 (*d*) Cooch Behar railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		
Main line—						
Gitaldaha to Manshahi Junction	28-9-91	15-9-93	18·82		1893	
Manshahi Junction to the town of Cooch Behar	30-8-95	15-12-98	3·22		to	19
Torsa Bridge	...	16-5-00	0·11		1897	
Total main line	...	...	...	22·15	1898	22
					1899	33
Branch—						
Cooch Behar-Santrabari extension (Native state section)—						
Cooch Behar to temporary Alipur Duar (Kholta)	20-12-97	15-4-99	10·96		1900	
Temporary Alipur Duar (Kholta) to the south bank of the Kaljani river.		18-1-00	0·49		to	34
Total Branch	...	...	...	11·45	1904	
Grand Total	...	...	...	33·60		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM—*concld.***

4 (*d*) Cooch-Behar railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The Cooch Behar railway is laid for 19·55 miles with 25 lb. and 1·83 miles with 41½ lb. steel rails, on pyinkado sleepers; and 12·22 miles with 40 lb. iron rails on sal sleepers. All rails are flat-footed and 24 feet long, and there are 9 sleepers to a rail.

Ballast.—The line is laid without ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 2,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Cooch Behar railway is worked under the following agreement:—

Agreement—of 15th June 1903 and having effect from the 1st January 1901 (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Cooch Behar state.

Currency of contract.—The Eastern Bengal (State) railway to maintain and work the Cooch Behar state railway for a period of five years from 1st January 1901.

Terms of working.—The Eastern Bengal (State) railway, for maintenance and working, to receive 40 per cent. of the gross earnings; provided that when the stock of the Eastern Bengal (State) railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal (State) railway will receive and retain up to, but not exceeding 45 per cent., of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs. 30 per mile per annum.

Rates and fares.—The Eastern Bengal (State) railway administration have full control over rates and fares.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	14,685	...	...	...	...	...
1892	4,09,186	...	...	...	...	...
1893	6,65,172	5,846	—2,455	...	18	183·94
1894	7,14,318	40,280	8,576	1·20	35	78·71
1895	7,30,953	53,174	19,200	2·63	46	63·89
1896	7,66,734	70,128	38,570	5·03	61	45·00
1897	9,01,219	64,262	35,344	3·92	51	45·00
1898	10,32,938	66,124	*6,657	0·65	57	45·00
1899	12,99,031	82,772	43,073	3·32	53	47·95
1900	12,83,906	94,792	51,602	4·02	50	43·41
1901	13,94,923	1,27,596	74,667	5·35	72	41·48
1902	13,95,766	1,24,741	74,452	5·33	71	40·31
1903	14,91,329	1,42,540	83,834	5·62	82	41·19
1904	14,71,331	1,47,575	86,996	5·91	84	41·05

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM—**

Lines comprising system.—The East Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) East Indian railway (5′ 6″ gauge)	1,932·87	279·23	2,212·10
(*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)	162·36	...	162·36
(*c*) South Behar railway (5′ 6″ gauge)	78·76	...	78·76
(*d*) Tarkessur railway (5′ 6″ gauge)	22·23	...	22·23
Total	2,196·22	279·23	2,475·45

Running powers—

	Miles.
Home line over Foreign lines:—	
Agra East Bank to Agra Fort, Rajputana-Malwa railway } for goods trains only	1·00
Naihati to Brace Bridge Hall and Chitpur, Eastern Bengal (State) railway } for goods trains only	34·50
Moghal Sarai to Benares Cantonment, Oudh and Rohilkhand (State) railway, for passenger trains only	10·00
	45·50
Foreign lines over Home line:—	
Bengal-Nagpur railway at Katni } for passenger and goods trains	0·30
„ „ „ at Asansol } for passenger and goods trains	0·50
„ „ „ at Howrah } for passenger and goods trains	1·00
Great Indian Peninsula railway, Agra to Tundla, } for passenger trains only	12·75
„ „ „ at Cawnpore, for passenger trains only	0·97
„ „ „ at Cawnpore, for goods trains only	0·52
„ „ „ at Manikpur } for passenger and goods trains	0·63
„ „ „ at Katni } for passenger and goods trains	0·33
North Western and Oudh and Rohilkhand (State) railways, Ghaziabad to Delhi } for passenger and goods trains	13·00
	30·05

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (a) East Indian railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
Main line—			Miles.	Miles.		Miles.	
Howrah to Hooghly	January '51	15-8-54	23·23		1854	38	
Hooghly to Pundooah		1-9-54	14·31		1855	120	
Pundooah to Khana junction		3-2-55	36·94		1856	120	
Khana junction to Raneegunge		3-2-55	45·71		1857	120	
Raneegunge to Siarsol	...	21-7-63	1·70				
Siarsol to Sitarampur	...	1-1-65	15·15				
Sitarampur to Luckeeserai junction	Feby. '66	1-1-71	124·64				
Luckeeserai to Dinapore	...	17-11-62	32·42				
Dinapore to Moghal Sarai	...	22-12-62	125·92		1858	139	
Moghal Sarai to Mirzapur	...	1-1-64	39·28		1859	286	
Mirzapur to south bank, Jumna	...	4-4-64	52·64		1860	370	
Jumna bridge to Allahabad	...	15-8-65	2·75		1861	561	
Allahabad to Cawnpore	...	3-3-59	119·47		1862	577	
Cawnpore to Etawah	...	1-7-61	86·46				
Etawah to Shikohabad	...	13-11-61	34·39				
Shikohabad to Tundla junction	...	1-4-62	22·92				
Tundla junction to Aligarh	...	1-3-63	48·56				
Aligarh to Chola (Bulandshahr Road)	...	1-4-64	35·54		1863	933	
Chola to Delhi (south bank, Jumna)	...	1-8-64	41·27		1864	1,131	
Delhi terminus	...	1-1-67	1·78		1865	1,155	
					1866	1,155	
			955·08		1867	1,380	
Loop line—							
Khana junction to river Adjai	...	3-10-58	12·00		1868	1,380	
River Adjai to Sainthia	...	3-9-59	25·12		1869	1,380	
Sainthia to Tinpahar	...	15-10-60	76·12		1870	1,380	
Tinpahar to Bhagalpur	...	1-11-61	69·12		1871	1,530	
Bhagalpur to Jamalpur	...	10-2-62	32·62		1872	1,530	
Jamalpur to Kiul	...	17-11-62	23·41				
			250·39		1873	1,530	
					1874	1,530	
					1875	1,530	
					1876	1,530	
Total main and loop lines	...	...	...	1,205·47	1877	1,530	
Branches on main line—							
Bhadreswar branch—							
Bhadreswar junction to the river bank	...	6-12-82	2·60		1878	1,530	
Hooghly bridge branch—					1879	1,582	
Bandel junction to Naihati	14-1-84	15-3-87	4·47		1880	1,600	
					1881	1,600	
Ondal loop—					1882	1,603	
Ondal to Babasole	July '82	1-5-64	2·03				
Babasole to Mangalpur		1-1-63	2·74				
Mangalpur to Toposi		2-2-63	2·65				
Toposi to Ikrah junction		15-4-94	2·42				
Ikrah junction to Gourangdi		1-6-95	14·16		1883	1,605	
Gourangdi to Alipur	29-3-91	30-3-95	7·54		1884	1,605	
					1885	1,611	
					1886	1,611	
			31·54		1887	1,610	
Ikrah branch—							
Sitarampore (mile 132 from Howrah) to mile 6·99	July '82	15-4-94	8·30				
Mile 6·99 to Ikrah junction	13-7-99	15-4-02	6·99		1888	1,610	
					1889	1,610	
					1890	1,610	
			15·29		1891	1,610	
					1892	1,610	
Jharia branch—							
Sitarampur to Barakar	9-3-92	1-1-65	5·43		1893	1,613	The first 7 miles of the Jharia branch were worked for coal traffic from the 1st August 1893.
Barakar to Katrasgarh	...	20-5-94	33·80		1894	1,664	
					1895	1,700	
			39·23		1896	1,701	
					1897	1,705	
Salanpur branch—							
Salanpur to Shamdi	9-3-92	7-9-94	4·29				
		1-1-97	1·24		1898	1,712	
			5·53		1899	1,711	
					1900	1,849	
					1901	1,838	
					1902	1,923	
Chanch branch—					1903	1,935	
From mile 144½ to Chanch	9-3-92	1-2-93	2·88		1904	1,933	
	11-2-96	5-8-96	1·00				
			3·88				
Carried over	...	...	102·54	1,205·47			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number Main head 5 / Sub-heads (*a*) to (*d*). **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Remarks.
			Miles.	Miles.	
Brought forward	...	...	102·54	1,205·47	
Pandra branch—					
From mile 148¾ on Jharia branch to Pandra	4-8-99	26-11-00	3·23		
Damoodur branch—					
Dheria Joba to the Damoodur river	15-1-94	30-6-95	8·00		
		15-7-96	1·77		
			9·77		
Kurhurbaree branch—					
Madhopur junction to Giridih	...	1-1-71	26·70		
Colliery lines—					
Katras-Kanoodih extension—					
Katrasgarh to Kanoodih	9-12-01	7-3-03	5·44		
Jharia-Dhanbaid Chord—					
Jharia to Dhanbaid		1-5-03	3·79		
Katras-Mulkera cross connection—					
Northern half of connection		15-8-03	0·67		
			9·90		
Mokameh Ghat branch—					
Mokameh junction to Mokameh Ghat	...	1-5-83	3·70		
Patna-Gya branch—					
Bankipore junction to Bankipore	13-2-78	2-6-79	0·25		
Bankipore to Jehanabad		21-4-79	28·95		
Jehanabad to Gya		2-6-79	29·22		
			58·42		
Barun-Daltonganj branch—					
Sone East Bank (Barun) to Rajhara	16-5-97	3-5-02	67·30		
Rajhara to Daltonganj		15-12-02	10·72		
			78·02		
Dighaghat branch—					
Bankipore junction to Dighaghat	30-7-84	2-4-85	5·53		
Tarighat branch—					
Dildarnagar junction to Tarighat	11-7-78	5-10-80	12·00		
Moghal Sarai-Gya branch—					
Moghal Sarai to Gya	...	1-3-00	125·48		
		1-5-02	0·86		
			126·34		
Jubbulpore branch—					
Naini junction to Jubbulpore	Feby. '63	1-8-67	223·58		
Allahabad fort branch	...	3-3-59	2·34		
Cawnpore city branch	...	15-2-79	0·88		
Agra branch—					
Tundla junction to Agra East bank	...	1-4-62	13·35		
Hathras city branch	...	1-11-98	5·58		
Branches on loop line—					
Azimganj branch—					
Nalhati to Azimganj	...	15-7-92	27·23		The Azimganj branch was originally on the 4′ 0″ gauge, but was converted to 5′ 6″ gauge, and incorporated with the East Indian railway from 1892.
Rajmehal branch—					
Tinpahar junction to Rajmehal	...	15-10-60	7·00		
Sakrighat branch—					
Sakrigali junction to the river Ganges	...	1-1-94	1·99		
Maharajpur branch	...	30-11-98	2·48		
Sultanganje branch	22-3-93	6-5-95	1·14		
Monghyr branch—					
Jamalpur to Monghyr	...	10-4-62	5·68		
Total branches	...	...	...	727·40	
TOTAL OPEN MILEAGE, EAST INDIAN RAILWAY PROPER	...	...	...	1,932·87	
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—		Probable date			
Gya-Barakar Chord—					
Maupur to 0·87 mile beyond Gurpa (Plains section)	25-3-02	31-3-06	25·26		
Mile 0·87 beyond Gurpa to Kodarma (Hill section)	20-6-02		18·42		
Kodarma to Hariharpur (Plateau section)	20-6-02		56·38		
Hariharpur to Dhainbaid	18-12-03	...	21·43		
Nagri to Kasunda			1·59		
			123·08		
Farukhabad branch—					
Shikohabad to Mainpuri	13-1-98	1-3-05	29·38		
Mainpuri to Farukhabad		1-1-06	36·44		
			65·82		
Colliery lines—					
Tasra siding	1-11-01	...	1·75		
Chandore branch—					
Mile 170¼ from Howrah on the Jharia branch to Chandore	17-3-03	...	4·16		Work on the Chandore branch abandoned.
			5·91		
Ondal-Sainthia Chord—					
Ondal to Sainthia	1-12-03	1-1-06	44·93		
Hapur branch—					
Khurja to Hapur	13-1-04	17-5-06	39·49		
Total lines under construction	...	...	...	279·23	
GRAND TOTAL, EAST INDIAN RAILWAY PROPER	...	...	...	2,212·10	

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Remarks.
			Miles.	
DOUBLE LINE, OPEN—				
Howrah to Serampore	...	10-3-57	11·74	
Serampore to Chandernagore	...	4-2-58	8·38	
Chandernagore to Hooghly	...	1-5-58	3·11	
Hooghly to Magra	...	1-10-58	5·49	
Magra to Pundooah	...	25-2-59	8·82	
Pundooah to Burdwan	...	1-10-59	28·72	Of the length between Pundooah and Burdwan, 2·20 miles (Boinchee to Debipur), are laid with a third track.
Burdwan to Khana	...	1-1-59	8·22	
Khana to Durgapur	...	1-6-70	31·35	
Durgapur to Raneegunge	...	2-9-70	14·36	
Raneegunge to Sitarampur	...	19-12-70	16·35	
Sitarampur to Luckeeserai	...	1-1-71	124·64	
Luckeeserai to Burhee	...	22-6-60	9·62	
Burhee to Barh	...	22-2-68	27·10	
Barh to Futwah	...	11-1-68	25·87	
Futwah to Dinapore	...	20-3-67	19·63	
Dinapore to Bihta	...	13-8-68	10·93	
Bihta to Arrah	...	28-3-70	13·50	
Arrah to Buxar	...	13-8-68	42·67	
Buxar to Dildarnagar	...	15-4-92	22·46	
Dildarnagar to Zamania	...	20-5-82	8·59	
Zamania to Sakaldiha	...	20-9-82	16·28	
Sakaldiha to Moghal Serai	...	10-8-82	11·49	
Hooghly bridge branch	...	15-3-87	4·47	
Sitarampur to Barakar	...	6-3-01	8·56	
Ghaziabad to Shahadara	20-10-99	20-2-02	8·13	
Shahadara to east side of Jumna bridge near Delhi		1-7-02	2·57	
TOTAL DOUBLE LINE, OPEN	...	...	493·75	
DOUBLE LINE, UNDER CONSTRUCTION—				
Gya-Barakar Chord—				
Hill section	...	...	12·78	
Plain section	...	...	0·72	
TOTAL DOUBLE LINE UNDER CONSTRUCTION	...	...	13·50	

Details of construction—

Permanent-way.—The main line from Howrah to Delhi, also the Loop line from Khana junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrah branch, Giridih branch, Patna-Gya branch, Moghal Sarai-Gya chord, Barun-Daltonganj branch and Agra branch are laid with steel rails throughout. A few short branches are still laid with iron rails: but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both up and down roads of the main line from Howrah to Kiul, a distance of 261 miles, the rails are bull-headed, weighing 85 lbs. per yard. The 85 lb. bull-headed rail has also been laid on the single line between Moghal Sarai and Mirzapur and on the Jharia branch between Sitarampur and Barakar. The rest of the main line and branches, with the exception of the Patna-Gya and Barun-Daltonganj branches, are laid with double-headed rails weighing 75 lbs. per yard. On the Patna-Gya branch the rail is double-headed 64 lbs. per yard and the Barun-Daltonganj branch is laid with a flat-footed rail, 75 lbs. per yard, Government of India section.

The iron rails on short branches are double-headed weighing 74 and 82 lbs. per yard and 20 and 23 feet in length.

The 85-lb. bull-headed rails vary in length from 30 to 37 feet, the latter being now adopted as the standard. The 75-lb. double-headed rails vary in lengths from 30 to 41 feet 6 inches, but no more rails of this section are now being ordered; all the relaying on the main line being done with 85-lb. bull-headed rails. The rails on the Barun-Daltonganj branch are 42 feet 6 inches in length.

As at present laid, about fifty per cent. of the sleepers are wood and the remainder are iron. The wooden sleepers principally consist of sal and deodar, the former being used as far as Cawnpore and the latter above: but owing to the difficulty in getting sal and deodar sleepers and to the rise in price of same, Australian hard woods are now being tried. The chairs are cast iron and vary in weight from 36 to 51½ lbs., each being fastened to the sleeper by two spikes to each chair. The iron sleepers are of the Denham Olpherts' pattern and weigh about 252 lbs. each. The sleepers consist of two cast iron plates and two jaws with tie bar, the parts being fastened together and gauge maintained by means of cotters and keys.

The number of sleepers per rail are 11 to 30 feet rail, 14 to 37 feet rail and 15 to 42 feet 6 inches rail.

The line was laid originally with double-headed iron rails weighing 74 and 82 lbs. per yard with cast iron chairs on wooden sleepers. The first relaying was commenced in 1876 with 75-lb. double-headed steel rails. The Denham Olpherts'

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM—*contd.***

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*contd.*

Details of construction—*concld.*

cast iron sleeper was introduced about 1881 and has been used extensively since in replacement of wood. The 85-lb. bull-headed rail which has been adopted as the standard for main line relaying is principally being laid with cast iron plate sleepers of Denham Olpherts' pattern. This type of sleeper has been adopted as the standard except where formation is subject to settlement on account of bad soil in which cases wooden sleepers and cast iron chairs are used, but there is comparatively little trouble on this account. Relaying with 85-lb. bull-headed rails was commenced in 1893 and is being carried out at the rate of 80 miles of single track per annum. Already 556 miles of track have been laid.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout except the Jharia, Damuda, Ikrah, Salanpore, Chanch, Pandra, Azimganj, Barun-Daltonganj and Moghal Sarai-Gya branches and the Ondal loop and Dhanbaid-Jharia Chord. The fencing consists principally of 4 and 5 wire fence with iron posts, though there are short lengths of wire fence with wood and stone posts, and on the Jubbulpore branch there are a few miles of stone walling.

Curves.—The sharpest curve is of 1,525 feet radius, 800 feet long, at mile 200¼, Baidyanath Junction station.

Gradients.—The ruling gradient of the main line is 1 in 300 except between Raneegunge and Luckeesarai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha. The ruling gradient of the Loop line and the Jubbulpore branch is 1 in 200; of the Moghal Sarai-Gya branch, 1 in 400; of the Patna-Gya branch, 1 in 250; of the Jharia branch, 1 in 140; of the Azimganj branch, 1 in 100; and of the Ondal Loop and Kurhurbaree branches, 1 in 80.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—22nd December 1879.—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking:—Ghazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hooghly); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Bankipore junction to the right bank of the Ganges at Digha Ghat); Jharia (Barakar to the Jharia coal-fields); Toposi colliery (Toposi to Kharabad, Nundi to Panuria and Salanpur to Shamdi); Gya (Bankipore to Gya); and Azimganj (Nalhati to Azimganj).

26th February 1896.—As to debenture capital.

22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway.

14th November 1899.—Contract modifying that of 1879.

The general conditions of the contracts are as follows:—

Government aid.—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital representing the deferred portion, *i.e.*, one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

Terms of contracts.—The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1880, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

	£
* Company's stock at date of purchase	... 26,200,000
Premium of 25 per cent.	... 6,550,000
	32,750,000

Currency of contracts.—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

NOTE.—Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

Power of Company to surrender contract.—See currency of contracts.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupees are divided in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupees is divided in proportion of fourteen-fifteenths to Government and one-fifteenth to the Company.

Rates and fares.—Certain maxima and minima rates and fares have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*a*) East Indian railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Annuity.	Company's share of net earnings.	Gain or loss to the State.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879 .	34,32,77,360	4,35,46,730	2,86,14,479	8·34	1,65,74,363	...	61,25,877	+ 59,14,239	
1880 .	34,35,77,327	4,35,04,947	2,86,72,035	8·35	†1,98,06,263	...	17,72,690	+ 70,93,082	Interest in 1880 includes annuity charges, which cannot be separated.
1881 .	34,87,63,677	4,54,11,472	3,08,35,036	8·84	31,05,426	1,73,92,000	20,63,867	+ 82,73,743	
1882 .	35,07,21,455	4,71,17,594	2,96,57,086	8·46	32,81,764	1,73,92,000	17,88,073	+ 71,95,249	
1883 .	35,24,91,304	4,94,67,085	3,11,50,980	8·84	38,16,170	1,72,57,772	19,99,731	+ 80,77,307	
1884 .	35,57,38,760	4,98,38,714	2,73,32,003	7·68	35,58,085	1,78,50,459	11,72,923	+ 47,41,188	
1885 .	35,85,93,619	4,63,86,899	3,30,16,960	9·21	38,13,262	1,79,75,714	16,29,502	+ 95,98,482	
1886 .	36,06,85,918	4,66,70,853	3,05,13,359	8·46	39,91,104	1,89,50,187	14,97,278	+ 60,74,842	
1887 .	36,12,15,681	4,60,65,661	3,13,34,263	8·67	40,70,944	1,92,13,333	15,87,252	+ 64,62,734	
1888 .	36,09,27,530	4,54,36,902	3,03,35,075	8·40	40,78,297	2,03,43,530	11,64,693	+ 47,53,555	
1889 .	36,19,22,300	4,49,57,901	2,94,05,330	8·12	41,84,108	2,09,60,000	8,31,347	+ 34,23,775	
1890 .	36,21,22,758	4,40,57,665	2,98,26,815	8·24	41,83,276	2,08,43,530	10,37,019	+ 42,62,988	
1891 .	36,15,18,827	4,56,57,001	3,60,37,028	9·97	43,93,426	1,86,94,054	26,45,392	+ 1,03,04,156	
1892 .	36,24,97,506	4,91,41,600	3,48,16,719	9·60	37,25,754	2,06,47,164	20,85,760	+ 83,55,041	
1893 .	36,91,20,357	5,08,44,654	3,60,94,293	9·78	41,26,869	2,34,46,780	17,04,125	+ 66,16,499	
1894 .	37,24,36,356	5,26,89,485	3,64,26,405	9·78	43,37,988	2,43,89,592	15,39,767	+ 61,59,068	
1895 .	37,82,18,020	5,41,50,856	3,78,34,726	10·00	45,73,681	2,61,01,122	14,29,078	+ 57,30,815	
1896 .	38,27,66,003	5,40,69,142	3,67,77,682	9·61	46,90,562	2,58,59,455	12,45,733	+ 49,81,932	
1897 .	39,39,91,173	5,8·,28 013	4,14 93,469	10·53	48,20,238	2,47,34,406	23,87,763	+ 95,51,062	
1898 .	40,71,91,886	5,97,96 060	4,08,07,269	10·02	50,46,514	2,32,64,533	24,99,244	+ 99,96,978	
1899 .	42,70,40,208	6,35,45,974	4,26,60.018	9·99	54,64,902	2,21,45,516	30,09,920	+ 1,20,39,680	
1900 .	44,28,43,540	6,81,74,972	4,47,15,571	10·10	60,18,054	2,15,60,963	18,09,104	+ 1,58,27,450	
1901 .	45,66,59,069	7,03,96,636	4,57,13,311	10·01	65,46,878	2,16,82,360	18,51,430	+ 1,56,82,623	
1902 .	47,06,40,852	6,77,38,713	4,29,80.833	9·13	70,34,492	2,16,46,868	16,19,965	+ 1,26,79,508	
1903	48,79,61,454	6,99,72,699	4,63,98,422	9·52	74,46,371	2,16,15,000	16,32,231	+ 1,56,54,820	
1904 .	50,28,09,029	7,59,71,544	5,05,61,422	10·06	80,23,978	2,16,15,000	20,64,276	+ 1,88,61,168	

TABLE II.

Calendar year.	East Indian (5′ 6″ gauge).		Patna-Gya (5′ 6″ gauge).		Nalhati (4′ 0″ gauge).		Dildarnagar Ghazipur (5′ 6″ gauge).		Calendar year.	East Indian (5′ 6″ gauge).		Patna-Gya (5′ 6″ gauge).		Nalhati (4′ 0″ gauge).		Dildarnagar-Ghazipur. (5′ 6″ gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week	Pro: of exp: to earnings.		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.			Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	...	...	...	...	1878	507	35·69	...	...	64	79·41	...	...
1854	131	62·18	...	...	...	...	...	...	1879	552	32·86	121	55·84	65	67·56	...	...
1855	108	51·97	...	...	...	...	...	...	1880	549	33·04	162	56·13	49	105·33	56	128·33
1856	167	40 62	...	...	...	...	...	...	1881	578	31·85	173	65·11	47	79·20	63	99·52
1857	232	38·12	...	...	...	...	...	...	1882	601	36·94	184	60·51	51	73·05	73	85·24
1858	279	46·49	...	...	...	...	...	...	1883	630	36·95	158	51·93	57	69·63	80	49·87
1859	253	44·77	...	...	...	...	...	...	1884	558	37·61	174	57·48	55	90·84	75	58·37
1860	231	43 36	...	...	...	...	...	...	1885	589	35·25	174	52·52	54	82·08	75	52·28
1861	240	46·49	...	...	...	...	...	...	1886	591	34 59	180	52·01	59	83·29	76	52·05
1862	192	53·81	...	...	...	...	...	...	1887	583	31·70	178	46·53	65	70·57	77	46·45
1863	222	55·01	...	...	...	...	...	...	1888	567	33·24	168	47·97	74	78·39	74	91·13
1864	253	50·79	...	...	36	48·88	...	...	1889	557	34·59	175	48 70	73	78·18	...	...
1865	311	41·82	...	...	41	63·28	...	...	1890	538	31·35	174	45 80	71	78·01	...	...
1866	374	44·24	...	...	36	105·15	...	...	1891	615	27·21	204	42 76	66	62·97	...	...
1867	369	43·91	...	...	45	68·81	...	...	1892	587	28·47	193	42·94	...	...	...	...
1868	346	44·88	...	...	57	83·60	...	...	1893	584	27·44	...	...	...	...	...	...
1869	399	44·42	...	...	60	59·64	...	...	1894	604	30·87	...	...	...	...	...	...
1870	424	43·68	...	...	60	48·77	...	...	1895	603	31·07	...	...	...	...	...	...
1871	338	43·36	...	...	55	58·07	...	...	1896	597	31·98	...	...	...	...	...	...
1872	363	41·44	...	...	53	57·14	...	...	1897	649	29·47	...	...	...	...	...	...
1873	382	38·75	...	...	60	60 06	...	...	1898	658	31·76	...	...	...	...	...	...
1874	474	35·70	...	...	61	67·22	...	...	1899	697	32·84	...	...	...	...	...	...
1875	374	39·58	...	...	57	76·42	...	...	1900	708	34·78	...	...	...	...	...	...
1876	452	35·08	...	...	54	111·15	...	...	1901	733	35·06	...	...	...	...	...	...
1877	565	31·85	...	...	64	100·47	...	...	1902	687	36·55	...	...	...	...	...	...
									1903	692	33·64	...	...	...	...	...	...
									1904	749	33·39	...	...	...	...	...	...

5 (*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of opening.	Mileage.	Total.
Delhi to Kalka	1-3-91	Miles. 162·36	Miles. 162·36

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent way consists of double-headed steel rails, 75 lb. to the yard, laid on Denham Olpherts' cast-iron plate and wooden sleepers with cast iron chairs of the same pattern as are used on the East Indian railway proper. The rails are 30 feet long and there are 11 sleepers to a rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is double fenced throughout with 4 wires and iron posts.

Curves.—The sharpest curve is of 1,010 feet radius, 1,100 feet long at mile 1,098 from Howrah.

Gradient.—The ruling gradient is 1 in 200 except for 15 miles from Kalka where it is 1 in 40.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working.

12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the 2 per cent. of gross earnings previously retained by Government.

24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 3½ per cent. on share capital.

The general conditions of the contracts are as follows:—

Government aid.—By the contract of 9th June 1897, Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3½ per cent. per annum on their share capital. Land was also provided free of cost.

Currency of contracts.—The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangement be made, Government may determine the contracts on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination, Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

Power of Company to surrender contracts.—Nil.

Terms of working.—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying over 52 per cent. to the Company. Surplus profits in excess of 3½ per cent. per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter, all surplus profits belong to the Company.

Rates and fares.—To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa to be not more than the maximum, nor less than the minimum rates and fares in force on the East Indian railway, and in the case of that portion between Umballa and Kalka to be not more than three times such maximum nor less than such minimum.

Statistics of working—

Calendar year.	Table I.							Table II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1889	58,90,335	...	...	...	...	...	...	...	...
1890	1,35,55,580	...	...	...	...	...	...	...	...
1891	1,55,44,692	9,07,697	4,72,002	3·04	...	4,72,002	3·04	128	48·00
1892	1,58,22,187	10,81,769	5,62,520	3·56	...	5,62,520	3·56	129	48·00
1893	1,55,24,600	11,98,508	6,23,224	4·01	...	6,23,224	4·01	143	48·00
1894	1,55,25,547	31,37,526	6,95,514	4·48	...	6,95,514	4·48	159	48·00
1895	1,55,06,120	14,60,519	7,59,470	4·90	...	7,59,470	4·90	174	48·00
1896	1,54,49,783	13,18,840	6,85,797	4·44	...	6,85,797	4·44	158	48·00
1897	1,53,26,585	15,73,319	8,18,126	5·34	...	8,18,126	5·34	186	48·00
1898	1,53,43,587	16,07,512	8,35,906	5·45	...	8,35,906	5·45	191	48·00
1899	1,53,01,272	14,49,378	7,29,541	4·77	...	7,29,541	4·77	172	48·00
1900	1,53,15,467	13,72,523	7,13,712	4·66	...	7,13,712	4·66	168	48·00
1901	1,52,92,648	18,05,858	9,29,046	6·14	...	9,29,046	6·14	213	48·00
1902	1,54,23,791	18,66,695	9,70,681	6·29	...	9,70,681	6·28	221	48·00
1903	1,55,49,998	18,30,960	9,52,099	6·12	...	9,52,099	6·12	216	48·00
1904	1,55,51,763	18,58,475	9,63,807	6·19	...	9,63,807	6·19	218	48·00

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

5 (*c*) South Behar railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of opening.	Mileage.	Total.
		Miles.	Miles.
Luckeeserai to Gya	5-7-99	78·76	78·76

Details of construction—

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lb. to the yard, laid on wooden sleepers and cast-iron chairs and Denham Olpherts' cast-iron plate sleepers of the same pattern as are used on the East Indian railway proper. The rails are 44 feet long and there are 15 sleepers to a rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced near villages, at stations and for a short distance on each side of level crossings only with 5 wire fencing with wrought iron posts.

Curves.—The sharpest curve is of 3,000 feet radius, 1,500 feet long, at mile ¼.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.

22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net earnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 4 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs. 2,40,000 in any half-year. Land was also provided free of cost.

Currency of contracts.—Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent going to the Company. Thereafter, Government retain 45 per cent. of the gross earnings (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

Rates and fares.—To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from E. I. Ry.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1895	5,17,988	...	...	...	...	...	...	...	...
1896	30,88,036	...	...	...	...	...	...	...	...
1897	62,72,345	...	...	...	...	...	...	...	...
1898	97,45,791	...	...	...	...	...	...	...	...
1899	1,18,16,730	2,03,328	1,32,163	1·12	33,403	1,65,566	1·40	101	35·00
1900	1,23,15,110	4,67,133	3,03,636	2·47	1,44,404	4,48,040	3·64	114	35·00
1901	1,23,66,533	5,14,870	3,08,822	2·50	1,28,082	4,36,904	3·53	125	40·02
1902	1,19,88,612	4,99,809	2,74,895	2·29	1,35,445	4,10,340	3·42	122	45·00
1903	1,20,01,897	5,24,695	2,88,583	2·40	1,57,706	4,46,241	3·72	128	45·00
1904	1,19,72,914	5,70,358	3,13,697	2·62	1,65,382	4,79,079	4·00	138	45·00

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 5}}{\text{Sub-heads } (a) \text{ to } (d)}$. **EAST INDIAN RAILWAY SYSTEM—*concld.***

5 (*d*) Tarkessur railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Seoraphuli to Tarkessur	20-2-83	1-1-85	22·23	22·23

Details of construction—

Permanent-way.—The permanent-way consists of 74 lb. iron rails laid on Denham Olpherts' cast-iron plate sleepers of the same pattern as are used on the East Indian railway proper. The rails are 20 and 23 feet in length with 7 and 8 sleepers, respectively.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout with 5 wire fencing with wrought iron posts.

Curves.—The sharpest curve is of 2,700 feet radius, 2,000 feet long, situated at the junction with the East Indian railway.

Gradients.—The ruling gradient is 1 in 500.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Land was provided free of cost.

Currency of contracts.—The contract of 1883 terminates on the 7th September 1982, but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years, and thereafter at intervals of ten years. In the event of such determination, Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

Power of Company to surrender contracts.—Nil.

Terms of working.—From the gross earnings are deducted working expenses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole; 5 per cent. of the gross earnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance is divided in proportion of four-fifths to the Tarakessur Railway Company and one-fifth to the East Indian Railway Company.

Rates and fares.—Certain maxima have been fixed, and the Company is authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1885	16,68,995	2,62,313	1,24,424	7·37	227	52·57
1886	17,24,717	2,49,003	1,19,136	6·91	215	52·15
1887	17,28,410	2,63,792	1,32,274	7·65	228	49·86
1888	17,34,822	2,79,717	1,36,780	7·88	242	51·10
1889	17,28,138	2,84,895	1,36,578	7·90	246	55·51
1890	17,28,778	2,56,526	1,44,283	8·35	248	49·64
1891	17,29,021	3,05,182	1,63,478	9·45	264	46·42
1892	17,32,567	2,93,674	1,54,837	8·94	254	47·28
1893	17,47,230	2,83,051	1,50,420	8·61	245	46·86
1894	17,47,240	3,06,159	1,56,469	8·95	265	48·90
1895	17,53,240	3,08,156	1,59,091	9·07	267	48·37
1896	17,56,898	3,13,243	1,57,005	8·95	271	49·88
1897	17,57,160	3,12,656	1,62,563	9·25	270	48·01
1898	17,77,085	3,14,056	1,58,461	8·92	272	49·54
1899	17,84,166	3,06,759	1,53,491	8·55	267	50·58
1900	17,84,166	3,32,965	1,61,132	9·03	288	51·61
1901	17,92,293	3,30,390	1,57,828	8·81	285	52·23
1902	17,91,612	3,28,510	1,58,348	8·86	283	53·23
1903	17,93,985	3,33,924	1,62,741	9·13	288	50·96
1904	17,97,555	3,30,685	1,63,606	9·07	284	50·76

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—**

Lines comprising system.—The Great Indian Peninsula railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Great Indian Peninsula railway	(5′ 6″ gauge)	1,561·63	37·59	1,599·22
(*b*) Agra-Delhi Chord railway	(5′ 6″ gauge)	119·51	0·43	119·94
(*c*) Bhopal-Itarsi railway	(5′ 6″ gauge)	57·39	...	57·39
(*d*) Bhopal-Ujjain railway	(5′ 6″ gauge)	113·27	...	113·27
(*e*) Bina-Goona-Baran railway	(5′ 6″ gauge)	145·63	...	145·63
(*f*) Indian Midland railway	(5′ 6″ gauge)	805·03	4·97	810·00
(*g*) Gwalior Light railway	(2′ 6″ gauge)	163·53	68·60	232·13
	Total	2,965·99	111·59	3,097·58

Running powers—

Home line over Foreign lines :—

Dadar junction to Colaba, Bombay, Baroda and Central India railway, for goods trains only	7·25
At Agra, Rajputana-Malwa railway, for passenger and goods trains	2·89
Agra to Tundla, East Indian railway, for passenger trains only	12·75
At Cawnpore, East Indian railway 0·97 miles for passenger trains and 0·52 miles for goods trains	1·49
At Manikpore, East Indian railway, for passenger and goods trains	0·63
At Katni, East Indian railway, for goods trains only	0·38
At Katni, Bengal-Nagpur railway, for passenger trains only	1·60
At Ujjain, Bombay, Baroda and Central India railway, for passenger and goods trains	0·24
At Cawnpore, Oudh and Rohilkhand (State) railway, for passenger and goods trains	0·86
From Cawnpore to Lucknow, Oudh and Rohilkhand (State) railway, for passenger trains only	44·63
Total	72·72

Foreign lines over Home line :—

Bombay, Baroda and Central India railway, Dadar Junction to Carnac bridge, for goods trains only	4·39
Bengal-Nagpur railway at Nagpur, for passenger and goods trains	0·65
Total	5·04

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—

This line was constructed and worked by a Joint Stock Company under a guarantee. It was purchased by the State in 1900, but the working was left in the hands of the Company under the terms of a new Contract, dated the 21st December 1900.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
NORTH-EAST LINE—						
Main line—			Miles.	Miles.		Miles.
Victoria terminus to Bori Bandar	31-10-50	1-1-82	0·19		1853	20
Bori Bandar to Thana		18-4-53	20·54		1854	33
Thana to Kalyan (Thana to Persick)	23-8-51	1-5-54	12·65		1855	49
Thana to Kalyan (Persick to Kalyan)	22-5-52					
Kalyan to Vasind	20-5-53	1-10-55	10·14		1856	37
Vasind to Asangaon		6-2-60	3·75		1857	37
Asangaon to Kasara		1-1-61	21·64		1858	193
Kasara to Igatpuri (Thull Ghat)		1-1-65	9·89		1859	244
Igatpuri to Nasik	25-8-67	28-1-61	31·43		1860	297
Nasik to Chalisgaon		1-10-61	37·24		1861	438
Chalisgaon to Jalgaon		6-10-62	57·48		1862	495
Jalgaon to Bhusaval		20-5-63	15·01		1863	555
Bhusaval to Burhanpur		20-11-65	33·91		1864	557
Burhanpur to Khandwa		3-9-66	42·78		1865	704
Khandwa to Bir	1858	17-2-68	21·15		1866	818
Bir to Itarsi		1-1-70	89·27		1867	854
Itarsi to Sohagpur		1-2-70	30·69		1868	875
Sohagpur to Jubbulpore		8-3-70	121·14		1869	875
Total main line, carried over	...	...	...	615·10		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$ **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Brought forward ...	...	...	...	615·10		
Branches—					1870	1,268
Chaliegaon-Dhulia branch—					1871	1,290
Chaliegaon to Dhulia	15-7-97	15-10-00	34·95		1872	1,290
Jalgaon-Amalner branch—					1873	1,290
Jalgaon to Dharangaon	Jany. '98	20-2-00	18·26		1874	1,308
Dharangaon to Amalner		4-4-00	16·00		1875	1,308
			34·26		1876	1,308
					1877	1,326
Nagpur branch—					1878	1,482
Bhusaval Junction to Malkapur		20-5-63	30·05		1879	1,493
Malkapur to Shegaon		21-10-64	32·53		1880	1,493
Shegaon to Badnera	27-9-58	18-12-65	72·67		1881	1,493
Badnera to Pulgaon		16-7-66	40·29		1882	1,493
Pulgaon to Sindi		5-11-66	38·27		1883	1,493
Sindi to Nagpur		20-2-67	29·44		1884	1,493
			243·25		1885	1,493
					1886	1,493
Khamgaon branch—					1887	1,492
Jalamb to Khamgaon	7-6-69	4-3-70	67·97		1888	1,492
Amraoti branch—					1889	1,492
Badnera to Amraoti	11-6-70	16-2-71	5·49		1890	1,492
Wardha Coal branch—					1891	1,491
Wardha to mile 490·20	5-2-72	1-2-79	18·95		1892	1,490
Mile 490·20 to mile 512·64	1-4-74	24-12-75	22·44		1893	1,490
Mile 512·64 to Warora		26-4-76	4·00		1894	1,490
			45·39		1895	1,490
					1896	1,491
Mohpani branch—					1897	1,491
Gadarvada to Mohpani	13-2-71	3-9-72	12·47		1898	1,491
Mohpani to Gotitoria	25-2-96	2-11-96	1·07		1899	1,491
Mohpani to new coal-fields	12-3-96	3-6-00	0·14		1900	1,502
			13·68		1901	1,561
					1902	1,561
Total branches	...	...	...	384·99	1903	1,561
					1904	1,561
TOTAL NORTH-EAST LINE	...	...	...	1,000·09		
SOUTH-EAST LINE—						
Main line—						
Kalyan to Palasdhari (Karjat) { Kalyan to Neral	13-5-54					
Neral to Palasdhari	10-1-55	12-5-56	30·61			
Palasdhari to Khandala (Bhore ghat)		14-5-63	13·20			
Khandala to Lonavla (Bhore ghat)	7-7-55	14-6-58	2·35			
Lonavla to Poona		14-6-58	39·66			
Poona to Diksal		15-12-58	64·25			
Diksal to Barsi Junction		23-10-59	50·60			
Barsi Junction to Mohol	5-10-55	21-1-60	28·32			
Mohol to Sholapur		6-6-60	20·51			
Sholapur to Gulbarga	3-8-65	1-2-70	70·29			
Gulbarga to the Kistna	Dec. '65	1-12-70	73·76			
Kistna to Raichur		1-5-71	15·31			
Total main line	...	...	...	408·86		
Branches—						
Dhond-Manmad branch—						
Dhond to Ahmednagar	25-3-77	15-3-78	50·41			
Ahmednagar to Manmad		17-4-78	95·03			
Khopoli branch—			145·44			
Palasdhari to Khopoli	30-1-55	12-5-56	7·24			
Total branches	...	...	...	152·68		
TOTAL, SOUTH-EAST LINE	...	...	...	561·54		
TOTAL OPEN MILEAGE.	...	...	...	1,561·63		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Warora-Bellarpur Extension.—						
Warora to Bellarpur	22-1-04	...	37·59			
Total mileage under construction	...	...	...	37·59		
GRAND TOTAL, GREAT INDIAN PENINSULA RAILWAY PROPER	...	...	...	1,599·22		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.
			Miles.
DOUBLE LINE, OPEN—			
NORTH-EAST LINE—			
Victoria terminus to Bori Bandar	...	1-1-82	0·19
Bori Bandar to Byculla	...	18-4-53	2·87
Byculla to Thana	...	1-5-54	17·67
Thana to Kalyan	...	22-10-66	12·65
Kalyan to Vasind	...	20-2-67	16·15
Vasind to Atgaon	...	25-4-67	9·65
Atgaon to Kasara	...	1-1-65	15·94
Kasara to Igatpuri	...	10-1-69	9·89
Igatpuri to Nasik	...	10-1-69	31·43
Nasik to Chalisgaon	...	10-1-69	87·24
Chalisgaon to Kajgaon	...	17-3-69	11·86
Kajgaon to Pachora	...	27-5-69	16·05
Pachora to Maheji	...	6-3-73	9·14
Maheji to Bhadli	...	6-6-73	27·39
Bhadli to Bhusaval	...	1-7-92	7·34
Bhusaval to Bhusaval Junction	...	11-1-89	1·11
Bhusaval Junction to Khandwa (Abna Junction)	...	1-2-70	75·12
Bagra tunnel to Towa viaduct	...		0·74
Total North-East line	...	...	353·13
SOUTH-EAST LINE—			
Kalyan to Palasdhari	...	25-7-70	30·61
Palasdhari to Khandala } Bhore ghat	...	14-5-63	13·20
Khandala to Lonavla } Bhore ghat	...	14-6-58	2·61
Total South-East line	...	...	46·42
NAGPUR BRANCH—			
Bhusaval Junction to Nadgaon	...	11-1-89	17·72
Nadgaon to Shegaon	...	1-4-90	44·65
Total Nagpur branch	...	...	62·37
TOTAL DOUBLE LINE, OPEN	...	...	461·92
DOUBLE LINE, UNDER CONSTRUCTION—			
NORTH-EAST LINE—			
Khandwa to Itarsi	1904	...	110·47
QUADRUPLE line, open—			
Victoria terminus to Byculla	...	1-1-82	3·06
QUADRUPLE LINE, UNDER CONSTRUCTION—			
Byculla to Curry Road	1904	...	3·72

Details of construction—

Permanent way.—On the main line the rails originally laid were 68 and 84 lb. double headed iron, 24 to 30 feet in length, these have now been replaced by steel rails 86 lb. double headed, 30 feet long, 82 lb. bull headed, 36 feet long, and 69 lb. double headed, 18, 20, 21, 24 and 30 feet long. There were 61·26 miles of 86 lb. 1,121·78 miles of 82 lb. and 552·22 miles of 69 lb. steel rails on the 31st December 1904 on the main line only. There are 12 sleepers under 36 feet rails, 10 sleepers under 30 feet and 8 under 24 feet rails. The sleepers originally laid were chiefly wooden, these have now to a large extent been replaced by iron pots. There were 1,685·36 miles of bowl sleepers, and 50 miles of wooden, mostly over ghat sections, on the 31st December 1904 on the main line only. The whole of the south-east line, except the ghat sections, is laid with iron pots. On the Dhond-Manmad branch the rails are chiefly 69 lb. double headed steel, 30 feet long, laid on iron pot sleepers. On the Wardha Coal branch there are 90·95 miles of 69 lb. double headed steel rails, 24 to 30 feet long, and 24·44 miles of 68 lb. double headed iron rails, 24 feet long; the sleepers are of wood for 33·01 miles and cast iron pots for 12·38 miles. The Khamgaon branch was laid originally with 57 lb. flat footed rails on cast iron pots, but in 1895 the whole of these were removed and replaced by second hand Great Indian Peninsula railway 68 lb. iron rails, 24 feet long, on cast iron pots. There is only 0·18 mile of road at Jalamb which is laid with 82 lb. bull headed steel rails, 36 feet long. On the Amraoti branch, with the exception of 0·50 mile at the Badnera end which is laid with both 82 lb. bull headed and 69 lb. double headed steel rails, the rails are 68 lb. double headed iron, and in various lengths laid on cast iron pots. The rails on the Jalgaon-Amalner and Chalisgaon-Dhulia branches are 2nd class 69 lb. double headed steel removed from the main line and laid in various lengths on cast iron pots. The Mohpani branch is laid with 69 lb. double headed steel rails, 24 to 30 feet in length, and cast iron pots, except the Mohpani yard where the rails are laid on wooden sleepers.

Ballast.—The line is fully ballasted throughout. The north-east line, from Bombay to Thana, Vasind to Bhadli, Mandva to Harda and Gotegaon to Jubbulpore with broken stone; and Thana to Vasind, Bhadli to near Mandva and Harda to Gotegaon with gravel. The south-east line, from Kalyan to Karjat, Khandala to near Talegaon, Hadapsar to near Washimbe and mile 390 to 406¼ with gravel; from Karjat to Khandala, Talegaon to Hadapsar and Washimbe (mile 201) to mile 390 with broken stone; and from mile 406¼ to Raichur with sand. The Nagpur branch is ballasted with broken stone. The Dhond-Manmad Branch is ballasted for about half its length at the Dhond end, with gravel and the other half at Manmad end with sand. The Wardha coal branch is ballasted with broken stone except for 1¼ miles near Hinganghat and Nagri which are ballasted with sand. The Khamgaon, Amraoti, Jalgaon-Amalner and Chalisgaon-Dhulia branches are ballasted with broken stone.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*contd.*

Details of construction—*concld.*

Fencing.—With the exception of the Mohpani, Chalisgaon-Dhulia, and Jalgaon-Amalner branches the line is well-fenced. The north-east line is fenced, from Bombay to Byculla, with *pucca* stone wall; from Byculla to Thansit (with the exception of a few places which are fenced with either *pucca* stone wall or old rail and tie bar fence 7 or 8 feet high) with 5 wire iron new pattern fence (consisting of 10 cast iron straining posts and 587 wrought iron intermediate posts per mile with wires 13 B. W. G.); from Thansit to Igatpuri, mostly with dry stone wall with top two courses in mortar, with portions here and there fenced with 5 wire iron new pattern fence; from Igatpuri to Towah bridge, with new pattern fence, except the Manmad and Chalisgaon station yards on down side only and Bhusaval station yard on upside, which are fenced with *pucca* stone wall; from Towah bridge to Singla bridge, with old pattern wire fence with struts; and from Singla bridge to Jubbulpore, with stone posts and wire. The south-east line is fenced, from Kalyan to Karjat, with new pattern fence; from Karjat to Lonavla, with dry stone with mortar top; from Lonavla to Kirkee, with new pattern fence; from Kirkee to Poona, with new pattern fence and *pucca* stone wall; and from Poona to Raichur, mostly with new pattern fence except the Sholapur station yard where there is *pucca* stone walling and some scattered pieces near Savalji end which are fenced with dry stone wall with mortar top. The Nagpur branch is fenced, from Bhusaval to Akola, Katipurna to near Malkhed and Dhamangaon to Talni with new pattern fence: and from Akola to Katipurna, Malkhed to Dhamangaon, and Talni to Nagpur, with old pattern iron fence, except the Dahegaon, Wardha, Sindi and Nagpur stations which are fenced with new pattern fence. The Dhond-Manmad and Wardha coal branches are fenced with new pattern fence. About 1·28 miles of wire fencing have been provided at each end of the Khamgaon branch, the remaining portion being unfenced. The Amraoti branch is fenced only at the Badnera and Amraoti ends.

Curves.—The sharpest curve has a radius of 990 feet; it is 0·34 mile long and is situated between miles 75 and 76 from Bombay.

Gradients.—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200 with 1 in 100 banking sections near Vasind and Asvali; the ruling gradient on the Ghat sections is 1 in 37; on the Dhond-Manmad branch, 1 in 100 except between Puntamba and Yeola where it is about 1 in 200; on the Wardha Coal branch, 1 in 133; on the Chalisgaon-Dhulia branch, 1 in 125; on the Jalgaon-Amalner branch, 1 in 200; on the Mohpani branch, 1 in 150; on the branch to the new coal-fields and Khamgaon branch, 1 in 100; and on the Amraoti branch, 1 in 163.

Terms of contract—

The railway is worked under the following contract:—

Contract of—21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

The general conditions of the contract are as follows:—

Government aid.—Government to pay interest at 3 per cent. per annum on the amount for the time being paid up or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company which *is at present authorised at £2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent. per annum or at such other rate as may be agreed upon; or will be raised by the Company by the issue of debentures or debenture stock at such rate of interest as the Secretary of State may determine. Land was also provided free; but any acquired after 30th June 1900 is paid for from the capital of the undertaking.*

Terms of contract.—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, and all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £40,781,568, * payable up to the 17th August 1948, in the form of a terminable annuity of £ 1,268,516.

	£
*Company's stock at date of purchase	34,859,218
Debentures and debenture stock	5,922,350
Total	40,781,568

Currency of contract.—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company from all debts and liabilities incurred under sanction.

Power of Company to surrender contract—Nil.

Terms of working.—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(*i*) The working expenses, which may include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(*ii*) A sum of Rs. 1,00,00,000 which is payable to Government;

(*iii*) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period $\frac{12}{13}$ths of the surplus are paid to the Secretary of State and $\frac{1}{13}$th to the Company. Provided that if the Company increases its new capital and issues further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of $\frac{1}{13}$th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

6 (a) Great Indian Peninsula railway proper (5' 6" gauge)—*contd.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on Capital outlay.	Guaranteed interest.	Annuity.	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879 . . .	25,59,56,152	2,52,48,315	1,01,90,602	3·98	1,24,65,646	...	6,14,291	—28,89,335
1880 . . .	25,58,96,113	2,49,53,253	1,11,05,551	4·34	1,24,93,200	...	5,53,836	—19,41,485
1881 . . .	25,75,86,095	3,20,56,823	1,61,74,097	6·28	1,24,93,200	...	18,23,748	+18,57,149
1882 . . .	25,75,90,499	3,53,63,201	1,80,88,488	7·02	1,24,23,200	...	32,05,888	+23,89,400
1883 . . .	26,07,58,700	3,51,14,365	1,75,36,005	6·72	1,25,12,825	...	33,22,918	+17,00,262
1884 . . .	26,34,97,600	3,36,56,544	1,59,55,250	6·06	1,42,81,503	...	24,76,048	—8,02,301
1885 . . .	26,84,43,316	3,64,32,047	1,79,31,397	6·68	1,51,17,467	...	26,97,344	+1,16,586
1886 . . .	26,92,99,673	3,92,57,907	2,06,78,390	7·75	1,60,91,138	...	39,89,569	+7,97,683
1887 . . .	27,03,76,543	3,99,27,468	2,10,80,237	7·80	1,66,44,568	...	41,03,068	+3,32,601
1888 . . .	27,25,93,364	4,10,59,219	2,16,35,667	7·94	1,72,81,176	...	43,31,246	+23,245
1889 . . .	27,50,39,981	3,70,63,814	1,78,91,616	6·51	1,74,32,160	...	26,82,255	—22,22,799
1890 . . .	27,77,29,064	3,81,45,242	1,90,32,952	6·85	1,55,23,271	...	31,04,971	+3,94,710
1891 . . .	27,75,19,781	4,52,55,338	2,32,50,703	8·38	1,67,57,262	...	51,89,008	+13,04,438
1892 . . .	27,72,17,255	4,03,65,627	2,01,95,097	7·28	1,88,04,314	...	38,18,506	—24,22,723
1893 . . .	27,72,93,860	3,88,13,742	1,79,90,922	6·49	1,91,65,618	...	29,25,476	—41,00,172
1894 . . .	27,91,09,112	3,62,74,296	1,62,42,786	5·82	2,18,32,651	...	30,40,331	—86,30,196
1895 . .	27,95,39,235	3,37,90,194	1,47,16,901	5·26	2,16,97,060	...	16,20,361	—86,00,520
1896 . .	27,90,29,178	3,44,19,629	1,54,05,060	5·52	2,02,18,872	...	21,53,257	—69,67,069
1897 . .	27,92,85,611	2,84,32,402	93,83,654	3·36	1,89,46,479	...	...	—95, 62,825
1898 . .	28,18,37,621	3,48,77,496	1,41,02,653	5·00	1,83,20,513	...	13,57,327	—55,75,787
1899 . .	28,53,49,756	3,58,09,431	1,56,57,520	5·48	1,79,65,944	...	17,77,032	—40,85,456
1900 { 1st half / 2nd half }	30,27,49,717	3,46,31,925	95,37,180 / 66,30,083	3·15 / 2·19	89,65,500 / 24,84,267	... / 94,88,889	14,48,208 / ...	—3,76,573 / —52,98,073
1901 . .	30,38,67,135	4,16,57,453	2,16,48,151	7·12	48,96,908	1,90,87,970	2,72,210	—26,08,937
1902 . .	30,57,71,091	4,23,12,668	2,10,73,893	6·89	49,41,692	1,90,56,785	2,92,872	—32,17,456
1903 . .	31,06,53,055	4,68,61,534	2,38,12,514	7·66	50,66,786	1,90,28,730	3,26,878	—6,09,890
1904 . .	32,00,72,108	4,62,41,344	2,41,79,728	7·55	53,09,707	1,90,28,730	2,91,543	—4,50,252

TABLE II.

Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	
1853 . .	119	45·90
1854 . .	88	60·81
1855 . .	89	70·21
1856 . .	113	42·17
1857 . .	138	45·27
1858 . .	173	42·19
1859 . .	172	51·19
1860 . .	144	60·97
1861 . .	139	76·35
1862 . .	149	62·62
1863 . .	175	67·55
1864 . .	119	72·07
1865 . .	414	59·54
1866 . .	357	58·07
1867 . .	368	55·69
1868 . .	357	61·30
1869 . .	348	67·79
1870 . .	300	62·25
1871 . .	307	63·03
1872 . .	284	64·25
1873 . .	284	64·09
1874 . .	303	59·17
1875 . .	324	47·28
1876 . .	369	47·60
1877 . .	492	48·30
1878 . .	429	48·91
1879 . .	383	59·64
1880 . .	372	55·49
1881 . .	426	49·40
1882 . .	470	48·00
1883 . .	466	48·67
1884 . .	503	52·31
1885 . .	467	50·46
1886 . .	503	46·49
1887 . .	511	46·84
1888 . .	526	46·96
1889 . .	494	51·42
1890 . .	508	49·80
1891 . .	584	48·25
1892 . .	525	49·93
1893 . .	501	53·37
1894 . .	468	55·18
1895 . .	436	56·38
1896 . .	444	55·20
1897 . .	367	66·96
1898 . .	450	59·49
1899 . .	462	55·76
1900 . .	439	52·49
1901 . .	518	48·03
1902 . .	533	50·18
1903 . .	575	49·18
1904 . .	592	49·36

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 6}{\text{Sub-heads } (a) \text{ to } (g)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

Calendar year.	WARDHA COAL BRANCH.							DHOND-MANMAD BRANCH.						
	TABLE I.						TABLE II.	TABLE I.						TABLE II.
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Pro: of exp: to earnings.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1879	55,99,772	1,65,158	6,078	0·11	2,51,434	−2,45,361	69	31·64	98,90,308	4,67,557	−27,664	...	4,07,525	−4,35,189	62	105·92
1880	57,32,921	3,02,879	−1,31,730	...	2,57,032	−3,88,762	65	152·90	1,07,29,227	6,95,094	65,145	0·61	4,76,299	−4,11,154	91	87·31
1881	58,80,993	4,75,988	1,19,447	2·03	2,37,916	−1,18,469	197	104·35	99,49,946	6,33,862	1,22,588	1·23	3,93,438	−2,70,850	*	*
1882	60,94,186	5,95,622	98,227	1·61	2,38,834	−1,40,547	255	76·80	99,25,416	7,39,558	1,59,192	1·60	3,97,802	−2,38,610	*	*
1883	63,93,758	7,64,702	5,89,382	9·22	2,47,602	+3,41,780	126	59·80	1,00,64,757	8,22,833	1,92,139	1·91	4,02,585	−2,10,446	109	76·65
1884	66,20,641	6,81,037	2,11,860	3·20	2,61,176	−49,316	121	64·80	1,02,49,438	8,77,100	2,03,785	1·99	4,08,283	−2,04,496	116	76·77
1885	66,65,755	6,53,649	1,46,395	2·20	2,64,219	−1,17,824	108	80·66	1,03,63,278	9,07,422	2,20,629	2·15	4,10,544	−1,89,921	...	...
1886	71,93,093	7,28,205	1,35,986	1·89	2,78,228	−1,42,292	114	92·23	1,09,26,745	9,84,718	2,83,764	2·14	4,80,353	−1,96,589	...	...
1887	71,00,635	7,68,052	1,31,981	1·86	2,59,465	−1,57,484	125	80·76	1,09,46,935	9,60,890	2,27,338	2·08	4,37,893	−2,10,555	...	...
1888	70,91,330	8,71,430	1,98,020	2·79	2,84,523	−86,503	135	74·21	1,09,75,115	10,31,762	2,55,445	2·33	4,38,458	−1,83,013	...	...
1889	70,54,755	8,62,694	2,99,621	4·25	2,82,844	+16,777	142	57·24	1,09,83,330	10,08,616	2,49,427	2·27	4,39,319	−1,89,892	...	...
1890	70,06,181	9,33,326	2,75,001	3·93	2,81,296	−6,295	140	63·64	1,09,93,448	10,61,816	2,63,134	2·39	4,39,629	−1,76,495	...	...
1891	49,81,196	2,58,971	60,053	1·21	2,03,779	−1,43,726	...	...	1,10,44,039	11,90,349	3,08,583	2·79	4,40,296	−1,31,713	...	...
1892	49,87,689	2,32,986	34,096	0·68	1,99,337	−1,65,241	...	...	1,10,73,028	12,18,412	3,28,335	2·96	4,42,535	−1,14,200	...	...
1893	49,87,689	2,10,856	89,213	1·79	1,99,484	−1,10,271	...	...	1,11,37,125	12,90,798	3,48,572	3·13	4,44,246	−95,574	...	...
1894	49,87,689	2,20,237	89,289	1·79	1,99,508	−1,10,219	...	...	1,12,11,642	13,61,866	3,81,993	3·41	4,48,018	−66,025	...	...
1895	49,90,794	1,98,552	76,362	1·53	1,99,539	−1,23,177	...	...	1,13,18,247	14,04,021	4,02,233	3·61	4,50,104	−41,871	...	...
1896	49,96,305	2,06,078	83,359	1·68	1,99,745	−1,15,886	...	...	1,13,73,050	13,11,585	3,67,395	3·23	4,55,018	−87,623	...	...
1897	49,96,325	1,96,858	58,331	1·17	1,99,794	−1,41,263	...	...	1,14,06,534	12,01,143	2,81,272	2·47	4,56,230	−1,74,958	...	...
1898	49,96,325	2,09,600	77,827	1·56	1,99,653	−1,22,026	...	...	1,14,23,076	11,18,296	2,89,536	2·53	4,56,411	−1,66,875	...	...
1899	49,96,325	2,07,216	82,500	1·65	1,99,859	−1,17,352	...	...	1,15,34,107	11,55,082	2,99,555	2·60	4,59,296	−1,59,741	...	...
1900 { 1st half / 2nd half }	*	1,75,380	{ 80,754 / ... }	...	{ 99,927 / ... }	−19,173	...	...	*	7,25,613	{ 2,11,584 / ... }	...	{ 2,30,220 / ... }	−18,686	...	...
1901	Amalgamated with the Great Indian Peninsula railway.								Amalgamated with the Great Indian Peninsula railway.							

Calendar year.	KHAMGAON BRANCH.						AMRAOTI BRANCH.					
	TABLE I.				TABLE II.		TABLE I.				TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.	Rs.		Rs.	
1879	5,35,617	30,086	−266	...	146	100·69	4,77,043	69,904	16,175	3·39	224	76·86
1880	5,19,888	27,363	4,022	0·94	91	84·44	4,45,585	50,866	3,639	0·82	163	92·85
1881	4,99,271	41,506	4,561	0·92	*	*	4,45,663	53,934	24,424	7·72	*	*
1882	4,91,164	75,906	30,389	6·19	*	*	4,44,651	85,147	39,535	8·89	*	*
1883	4,90,996	62,657	22,469	4·58	151	64·14	4,44,860	96,160	44,387	9·38	308	53·84
1884	4,90,903	46,830	13,037	2·66	113	72·16	4,44,774	76,782	34,174	7·68	246	55·49
1885	4,90,739	41,363	11,020	2·25	...	...	4,44,730	80,803	34,447	7·75	...	...
1886	4,89,613	59,452	20,233	4·13	...	...	4,44,686	95,111	44,137	9·93	...	...
1887	4,89,180	53,479	16,990	3·47	...	...	4,44,308	88,157	35,255	8·07	...	...
1888	4,88,357	52,635	15,797	3·23	113	...	4,43,892	81,710	30,886	6·96	...	...
1889	4,90,911	65,372	22,528	4·59	...	...	4,45,615	1,02,023	41,671	9·35	...	...
1890	4,90,520	55,288	26,092	5·32	...	...	4,45,155	1,01,502	46,254	10·39	...	...
1891	4,90,408	66,675	32,620	6·65	...	...	4,49,395	1,12,909	53,893	11·88	...	...
1892	4,89,132	65,548	30,909	6·32	...	...	4,50,160	1,05,762	48,637	10·80	...	...
1893	4,87,567	21,697	21,997	4·51	...	...	4,49,998	43,941	43,056	9·57	...	...
1894	4,86,003	21,966	21,667	4·46	...	...	4,49,461	42,795	41,910	9·32	...	...
1895	5,20,947	26,031	26,031	5·00	...	...	4,49,988	39,137	38,253	8·50	...	...
1896	5,22,603	24,446	24,446	4·63	...	...	4,51,119	43,756	42,871	9·50	...	...
1897	5,23,150	13,901	13,901	2·66	...	...	4,52,445	30,746	29,862	6·60	...	...
1898	5,22,150	24,326	24,326	4·66	...	...	4,54,498	40,057	39,172	8·62	...	...
1899	5,22,150	41,850	14,850	2·84	...	...	4,54,417	33,099	32,214	7·09	...	...
1900	5,22,150	35,788	13,924	2·67	...	...	4,54,418	78,332	32,436	7·14	...	...
1901	5,22,150	49,378	23,537	4·47	120	52·74	4,51,915	1,06,578	50,537	11·12	365	53·73
1902 { 1st half. / 2nd half. }	*	{ 32,968 / ... }	17,209	...	120	52·35	*	{ 79,582 / ... }	41,099	...	488	53·88
1903	Amalgamated with the Great Indian Peninsula railway.											

* Included with the Great Indian Peninsula railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-head (a) to (y)}}$ **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*b*) Agra-Delhi Chord railway (5′ 6″ gauge)—

This line has been constructed by the State and is worked by the Great Indian Peninsula Railway Company.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Raja Ki Mundi (Agra) to Kosi	15-9-98	3-12-04	56·89	
Kosi to Delhi Sadr		15-11-04	62·62	
TOTAL MILEAGE, OPEN	...	...	...	119·51
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Delhi Sadr to Delhi Junction	15-9-98	1-3-05	0·43	0·43
GRAND TOTAL	...	...	...	119·94

Details of construction—

Permanent-way.—The line has been laid with 85 lb. bull headed steel rails, 40 feet long, on cast iron chairs, 45 lb. spiked with 3 spikes to deodar sleepers, 14 to a rail.

Ballast.—The line is ballasted with kunkur soling about 7 cubic feet per foot run and stone ballast to bring it up to full section.

Fencing.—Kosi-Delhi section is fenced with stone posts and 4 wires and Agra-Kosi section is being similarly fenced.

Curves.—The sharpest curve is of 950 feet radius between Delhi Sadr and Delhi Junction.

Gradients.—The ruling gradient of the line is 1 in 400, except between Raja Ki Mundi Junction and Agra Jail and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Terms of contracts—

The terms of agreement for working are under consideration.

Statistics of working—

Calendar year.	TABLE I.						TABLE II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest charges.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1904	1,05,91,000	18,070	9,992	0·09	2,95,164	—2,85,172	43	44·71

6 (*c*) Bhopal-Itarsi railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Itarsi to Hoshangabad	31-7-80	1-6-82	10·89		1882	11
Hoshangabad to Bhopal		18-11-84	64·22		1883	11
Total, main line	...	...	...	57·11	1884 to 1904	57
Branch—						
Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal	July '94	11-11-95	0·28	0·28		
TOTAL	...	...	...	57·39		

Details of construction—

Permanent-way.—The line was laid originally with 62 lb. flat-footed steel rails, but they were replaced by the Indian Midland railway 80 lb. flat-footed steel rails, 30 feet long, except at Hoshangabad and Barkhera station yards. A few of these rails near miles 16 and 30 are 27 feet long. The sleepers originally laid were partly of steel and partly of creosoted pine and other kinds of wood. The whole of the line with the exception of Hoshangabad, Barkhera and Hirania station yards has now been relaid with Indian Midland railway cast iron pot sleepers. There are 10 sleepers to a 30 feet rail.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*b*) Bhopal-Itarsi railway (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced with five strand wire on stone posts, except at the Bhopal end where the strand wire is on iron posts.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Terms of contracts—

The Bhopal-Itarsi railway is worked under the following :

Agreement of—16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890, Agreement supplemental to that of 1880 for division of profits.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows :—

Government aid.—The British Government have paid for the portion, 13·11 miles, in British territory, and a moiety of the cost of the bridge over the Nerbudda or in all, about 13 lakhs ; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.

Currency of contracts.—The provisions in the principal contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend and are applicable to the Bhopal-Itarsi railway.

Power of Company to surrender contracts.—Nil.

Terms of working.—The Company receives a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.

Rates and fares.—The same rates and fares as are in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	TABLE I. Bhopal-Itarsi (British section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Bhopal-Itarsi (Native State section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per-cent. on Capital outlay.	TABLE II. British section. Earnings per mile per week.	Proportion of expenses to earnings.	Native state section. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1880	...	...	...	...	...	...	1,21,846	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	15,78,157	...	...	...	...	...	...	...
1882	12,50,000	14,376	2,704	0·08	50,000	−47,296	34,60,091	14,376	2,704	0·08	70	81·90	Included with British section	
1883	12,50,000	25,573	−9,135	...	50,000	−59,135	38,13,256	25,573	−9,135	...	43	135·72		
1884	12,50,000	7,654	−1,406	...	50,000	−51,406	45,83,261	28,102	−5,152	...	40	104·13		
1885	12,50,000	27,425	−3,874	...	50,000	−53,874	47,71,375	1,04,683	−14,789	...	Included with Peninsula railway.		Great Indian way.	
1886	12,50,000	27,822	−3,240	...	50,000	−53,240	48,26,036	1,47,416	−12,501	...				
1887	12,50,000	48,227	3,850	0·31	50,000	−46,150	48,09,989	1,85,576	14,813	0·31				
1888	12,50,000	55,117	5,340	0·43	50,000	−44,660	48,01,701	1,86,548	18,072	0·38				
1889	12,50,000	79,163	−5,422	...	50,000	−55,422	48,40,846	2,67,936	−18,351	...	117	106·85	117	106·85
1890	12,85,077	87,765	−16,572	...	50,351	−66,923	50,00,000	2,97,049	−56,093	...	130	118·88	130	118·88
1891	15,13,568	1,30,884	48,607	3·21	57,713	−9,106	50,00,000	4,66,431	1,73,154	3·46	200	62·50	199	62·50
1892	17,46,209	1,53,099	56,397	3·23	69,131	−12,734	50,00,000	4,47,797	1,65,883	3·32	226	63·16	195	62·96
1893	20,25,058	1,69,162	52,038	2·57	78,429	−26,391	50,00,000	4,24,236	1,30,925	2·62	251	69·17	185	69·17
1894	21,71,496	1,61,638	61,455	2·83	83,509	−22,054	50,00,000	3,80,217	1,44,679	2·89	237	61·98	166	61·97
1895	22,47,963	1,42,658	46,114	2·05	89,323	−43,209	50,00,000	3,16,074	1,02,821	2·06	209	67·68	138	67·64
1896	22,71,877	1,63,688	62,744	2·76	90,107	−27,363	50,00,000	3,61,363	1,38,532	2·77	241	61·75	157	61·62
1897	22,97,134	1,52,215	61,135	2·66	91,805	−30,671	50,00,000	3,31,379	1,33,070	2·66	223	59·84	144	59·84
1898	23,24,365	1,93,364	79,435	3·42	92,477	−13,042	50,00,000	4,17,010	1,71,375	3·43	284	58·81	181	58·90
1899	23,61,938	2,09,611	84,080	3·56	93,303	−9,223	50,00,000	4,47,225	1,79,444	3·59	307	59·89	194	59·88
1900	23,87,339	2,55,120	1,27,332	5·33	95,293	+32,039	50,00,000	7,90,489	2,67,289	5·35	375	50·12	332	50·06
1901	25,46,891	2,92,861	1,44,235	5·66	98,989	+45,246	50,00,000	5,85,152	2,88,838	5·77	430	50·75	254	50·64
1902	28,02,330	3,53,111	1,71,236	6·11	1,06,632	+64,604	50,00,000	6,30,630	3,16,683	6·33	518	51·51	274	49·74
1903	30,92,697	3,77,177	1,91,443	6·19	1,17,285	+74,158	50,00,000	6,31,911	3,21,328	6·43	559	49·48	327	48·24
1904	31,52,907	3,95,734	1,98,066	6·28	1,20,127	+77,939	50,00,000	6,43,742	3,22,374	6·45	583	50·14	279	49·81

6 (*d*) Bhopal-Ujjain railway (5′ 6″ gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Bhopal to Ujjain	10-11-92	11-11-95	Miles. 113·27	Miles. 113·27

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

6 (*d*) Bhopal-Ujjain railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails, 30 feet long, laid on transverse steel sleepers, 10 to a rail.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings, with five strand wire on iron posts.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The Bhopal-Ujjain and Bina-Goona-Baran railways are worked under the following :—

Agreements of—15th July 1896, 4th August 1896, 12th May 1899 (between the Government of Her Highness the Begum of Bhopal and that of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working.

27th February 1899 (between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company) for working.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the agreements are as follows :—

Government aid.—The line from Bina to Baran is owned jointly by the Durbars of the Gwalior, Tonk and Kotah states; and that from Bhopal to Ujjain by the Bhopal and Gwalior states.

Currency of agreements.—The agreements may be terminated on the expiry of ten years from the dates of the opening of the railways, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working.—The Company retains 50 per cent. of the gross receipts of the railway of each half year; and receives rent for works, &c., in sole and joint use at Bina and Ujjain Junctions respectively; and rent for the telegraph lines and instruments when not the property of the railway. (These terms are applicable to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Gwalior state).

The Company retains out of the gross receipts a sum (which includes any single item of capital expenditure, not exceeding Rs. 1,000 to be classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same percentage to the entire gross receipts of the railway for each half-year as the aggregate working expenses of the whole system of the Company (including the railway) bear to the gross receipts of that system for the same half-year. (These terms are applicable to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Bhopal, Tonk and Kotah Durbars).

Rates and fares.—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	88,462	...	...	...	...	...
1893	22,76,863	...	...	...	...	...
1894	53,53,849	...	...	...	...	...
1895	6 ,69,331	...	...	...	...	...
1896	77,77,604	3,69,114	1,80,218	2·32	63	51·17
1897	75,36,180	3,72,337	1,84,660	2·45	63	50·40
1898	75,85,739	4,16,940	2,05,651	2·70	71	50·82
1899	76,54,290	5,62,241	2,77,911	3·63	99	52·28
1900	76,88,020	9,46,349	4,65,681	6·06	161	50·79
1901	77,61,569	5,45,916	2,62,044	3·38	93	52·00
1902	75,02,855	5,82,063	2,92,357	3·75	99	52·36
1903	78,11,402	4,44,766	2,23,049	2·86	76	49·85
1904	78,14,670	4,54,721	2,27,387	2·91	77	49·99

6 (*e*) Bina-Goona-Baran railway (5′6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
From the joint boundary of the Indian Midland and Bina-Goona-Baran railways, a point 2·00 miles from the centre of Bina station, to Goona	2-3-92*	22-9-95	71·78	...	1895 to 1898	72
From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet)	28-1-97	15-5-99	73·90	...	1899 to 1904	146
Total, Bina-Goona-Baran	...	...	...	145·68	...	..

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

6 (*e*) Bina-Goona-Baran railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 75 lb. flat-footed steel rails, 30 feet long, on deodar sleepers except for 2 miles at the Goona end where the rails are 80 lb. flat-footed steel, Indian Midland railway type, 30 feet long, on Indian Midland railway pot sleepers. There are 10 sleepers to a rail.

Ballast.—The line is ballasted, from Bina to Pipraigaon with broken stone, from Pipraigaon to Shahdaura-gaon partly with broken stone and partly with laterite, from Shahdaura-gaon to half-way between Goona and Rothiai with laterite and from there to Baran with broken stone.

Fencing.—The line from Bina to Goona is fenced with 5 strand wire on iron posts, except for 2 miles at the Bina end where the 5 strand wires are on stone posts. The Goona-Baran section is unfenced except at stations, where 5 strand wire on iron posts is provided.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 125.

Terms of contract.—The terms of the Bhopal-Ujjain railway (page 149) apply.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Proportion of exp. to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	51,905	...	...	...	...	...
1892	2,57,611	...	...	...	...	...
1893	35,18,701	...	...	...	...	...
1894	47,79,618	...	...	...	...	...
1895	49,81,035	...	...	...	19	54·42
1896	54,16,074	91,140	36,821	0·68	24	59·60
1897	87,73,621	1,02,886	43,446	0·50	27	57·57
1898	97,66,068	1,30,004	58,040	0·59	35	55·36
1899	99,31,689	2,67,859	1,26,108	1·27	43	52·83
1900	1,00,21,605	4,34,847	2,20,490	2·20	57	49·29
1901	1,00,43,276	2,52,716	1,32,970	1·32	33	51·34
1902	99,14,442	2,38,825	1,19,792	1·21	32	52·71
1903	99,62,459	3,21,585	1,62,457	1·63	42	49·49
1904	99,87,016	3,91,886	1,97,745	1·98	52	49·54

6 (*f*) Indian Midland railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Bhopal to Jhansi	1886	1-1-89	180·49		1878	34
Jhansi to Gwalior	11-6-86	1-3-89	60·39		1879	66
Gwalior to Hatampur	24-8-77	20-12-79	32·40		1880	66
Hatampur to Dholpur		15-5-81	8·55		1881	75
Dholpur to Agra Cantonment	16-2-76	10-1-78	33·69		1882	75
Total, main line	...	...	...	315·53	1883	75
Branches—					1884	75
Manikpur branch—					1885	75
Jhansi to Mau Ranipur	23-8-83	5-6-89	39·96		1886	117
Mau Ranipur to Banda		1-8-89	78·96		1887	117
Banda to Manikpur		15-2-89	61·45		1888	211
					1889	677
Cawnpore branch—	Cawnpore to Kalpi, 12-3-84; Kalpi to Jhansi, 3-3-86.		180·37		1890	677
Jhansi to Chaunrah		1-2-88	94·99		1891	677
Chaunrah to Cawnpore		1-4-86	40·44		1892	677
			135·43		1893	677
					1894	677
Bina to point of junction with Bina-Goona-Baran railway.	...	1-5-95	2·00		1895	679
Bhopal to point of junction with Bhopal-Ujjain railway.	...	11-11-95	0·21		1896	680
			2·21		1897	680
Bina-Saugor-Katni branch—					1898	727
Bina to Saugor	Aug.'87	5-6-89	46·24		1899	796
Saugor to Damoh	Dec.'95	26-3-98	47·88		1900	796
Damoh to Katni	Jan.'86	1-1-99	67·88		1901	796
From centre of Katni-Murwara station to junction with Bengal-Nagpur railway	...	1-1-00	0·71		1902	797
Connecting link with East Indian railway at Katni-Murwara from points in Indian Midland railway main line to junction with East Indian railway.	...	1-1-99	0·34		1903	805
			163·00		1904	805
Ait to Kunch	23-9-02	7-12-03	8·50			
Total branches	...	...	...	489·51		
TOTAL OPEN MILEAGE	...	...	...	805·03		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Cawnpore-Collectorgunj branch	24-2-02	...	0·63			
Agra-Balingunj branch—						
Agra Road to Raja-ki-Mandi	12-11-00	1-3-05	2·10			
Raja-Ki-Mandi to Balingunj		...	2·24			
TOTAL MILEAGE UNDER CONSTRUCTION	...	...	...	4·97		
GRAND TOTAL, INDIAN MIDLAND RAILWAY	...	...	...	810·00		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 6}{\text{Sub-heads } (a) \text{ to } (g)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

6 (*f*) Indian Midland railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The whole of the main line, the Manikpur branch, the Cawnpore branch from Jhansi to mile 326·64 and from Bina to Katni are laid with 80-lb. flat-footed steel rails, 30 feet long, on cast iron pot sleepers, 11 to a rail. The Cawnpore branch from mile 326·64 to Hamirpur Road, except about 0·60 mile near Jumna bridge which is laid with 80-lb. flat-footed rails on wooden sleepers, is laid with East Indian railway 75-lb. double-headed steel rails, 30 feet long, on Denham Olpherts' sleepers, except for two miles laid with Great Indian Peninsula railway pattern pots, and for about 3 miles near Kalpi laid with wooden sleepers; all sleepers being at the rate of 11 to a rail. The East Indian railway type rails and Denham Olpherts' sleepers are being gradually renewed with Indian Midland railway 80 lb. flat-footed steel rails and cast iron oval pots.

Ballast.—The main line is ballasted, from Bhopal to Sumer, with stone; from Sumer to Basoda, with mixed ballast of gravel, laterite, stone and kunkur; from Basoda to Kethora, with gravel laterite; from Kethora to Bina, with stone and kunkur, with a portion of about ¾ mile with gravel laterite; from Bina to Mania, with broken stone; from Mania to Bhandai, with stone and kunkur and from Bhandai to Agra with stone. The Manikpur branch is ballasted with stone, with the exception of 4 places, each 2 miles long, between Badausa and Chitrakot, which are ballasted with bujree. The Cawnpore branch is ballasted, from Jhansi to Orai, with stone; from Orai to Jumna river, with bujree; from Jumna to Hamirpur Road partly with kunkur and partly with brick and kunkur mixed. The Bina-Saugor-Katni branch is ballasted with stone.

Fencing.—The main line, from Bhopal to Bamora, is fenced with 5 strand wires and iron posts, with the exception of about 1 mile near Kalhar which is fenced with 5 strand wires and stone posts; from Bamora to Basai, with 5 strand wires and stone posts; from Basai to Gwalior, with 5 strand wires and iron posts with the exception of about 2 miles at Jhansi which is fenced with 5 strand wires and stone posts; from Gwalior to Dholpur, partly with 5 strand wires and stone posts and partly with earth mound and two wires and stone posts; from Dholpur to Bhandai, mostly with earth mound and two wires and stone posts; and from Bhandai to Agra, partly with 5 strand wires and stone posts and partly with earth mound and two wires and stone posts. On the Manikpur branch between Jhansi and Banda, the line at the Jhansi end for about 3 miles and the station yards are fenced with 5 strand wires and iron posts and about one mile near the Jhansi end with 5 strand wires and stone posts. From Banda to Manikpur the line is fenced throughout with 5 strand wires and iron posts. On the Cawnpore branch the line is fenced throughout with 5 strand wires and iron posts. On the Bina-Saugor-Katni branch, the line from Bina to Saugor is fenced with 5 strand wires and iron posts and the rest of the line is unfenced with the exception of Damoh and Katni Murwara station yards which are fenced with 5 strand wire and iron posts.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra, 1 in 150 and between Jhansi and Manikpur, 1 in 125. The Jhansi-Cawnpore branch is practically level except at bridge approaches where the gradients are 1 in 250 and 1 in 300; and between Jhansi and Garhmau where it is 1 in 200. On the Bina-Katni-Murwara branch the gradient is 1 in 200, except for 3 miles on the Khurai-Mundra section where it is 1 in 100 and on the Ghatera-Salaia section where there are short lengths of 1 in 125 and 6 miles of 1 in 100.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—2nd October 1885—Indian Midland Railway Company's principal contract.
18th March 1890—Contract for the acquisition of the Scindia railway.
13th June 1896—Contract for the Saugor-Katni railway.
21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government aid.—Interest at 4 per cent. per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required, the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system, and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company raising only the amount required for expenditure in England. Land was also provided free.

Currency of contracts—(1) *Indian Midland railway contract.*—The contract of 1885 may be determined by Government by giving 12 months' previous notice, on the 31st December 1910, or on the 31st December of any succeeding tenth year, Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or if the line be worked at a loss for not less than three half-years continuously. On the termination of the contract, the Company is to hand over to Government the railway and all its belongings of every description and Government are to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900. But the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits (as stated below) remains in full force till the termination of either the contract of 1885 or that of 1900.

(2) *Scindia and Saugor-Katni railways contracts.*—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings for any calendar year will be deducted working expenses and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of them interest paid by them to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (g)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

6 (*f*) Indian Midland railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	TABLE II. Scindia. Earnings per mile per week.	Scindia. Pro: of exp: to earnings.	Indian Midland. Earnings per mile per week.	Indian Midland. Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.	
1878	...	...	...	...	...	...	...	54	133·30	...	...
1879	73,22,551	90,916	—33,773	...	3,06,178	...	—3,37,950	39	134·95	...	...
1880	81,63,253	2,01,893	20,139	0·25	3,57,620	...	—3,37,491	58	88·05	...	...
1881	82,16,663	3,01,681	78,342	0·91	3,48,809	...	—2,70,467	81	77·35	...	...
1882	87,63,714	3,29,299	92,231	1·05	3,47,303	...	—2,55,072	85	71·99	...	...
1883	92,02,537	3,38,511	1,59,716	1·72	3,56,750	...	—1,97,034	87	52·82	...	...
1884	1,18,68,111	3,68,326	1,72,603	1·15	3,74,122	...	—2,01,519	95	53·14	...	...
1885	1,60,14,107	3,94,081	1,99,680	1·24	6,48,112	...	—4,48,432	101	49·33	...	...
1886	2,48,06,293	3,91,832	2,14,526	0·86	18,69,268	...	—16,54,742	101	49·69	56	32·03
1887	5,10,96,457	6,32,204	2,78,043	0·54	20,00,184	...	—17,22,141	117	46·62	81	30·63
1888	6,96,63,213	10,27,638	3,74,204	0·54	28,55,488	...	—24,81,284	95	47·74	99	72·53
1889	7,84,45,085	30,69,255	6,33,111	0·81	31,24,436	...	—24,91,045	...	...	92	77·32
1890	8,32,79,427	31,22,365	5,99,780	0·72	36,09,286	...	—30,09,506	...	...	86	80·80
1891	8,52,46,148	41,62,361	13,52,172	1·59	33,12,200	...	—19,60,028	...	...	115	67·51
1892	8,65,79,006	44,77,625	17,26,260	1·99	37,22,985	...	—19,97,725	...	...	124	61·45
1893	8,71,82,813	44,59,053	17,00,409	1·95	41,40,194	...	—24,39,785	...	...	123	61·87
1894	8,78,06,437	52,22,033	22,02,334	2·51	42,59,815	...	—20,57,481	...	...	144	57·83
1895	8,81,49,985	44,91,707	16,48,360	1·87	45,97,495	...	—29,49,135	...	...	124	63·30
1896	9,25,53,896	48,51,951	20,17,929	2·18	44,23,983	...	—24,06,154	...	...	134	58·41
1897	9,77,94,421	54,89,540	24,06,565	2·46	42,53,593	...	—18,47,328	...	...	150	56·16
1898	9,96,74,805	56,25,823	25,11,911	2·52	39,99,986	...	—14,88,075	...	...	147	55·35
1899	10,16,34,072	64,77,226	27,82,950	2·74	39,66,461	...	—11,83,511	...	...	152	57·03
1900	10,31,35,002	90,60,560	48,72,287	4·72	38,18,460	...	+10,53,827	...	...	213	46·23
1901	10,58,27,081	82,43,068	42,50,587	4·02	38,82,861	1,68,164	+ 1,79,562	...	...	199	48·43
1902	10,62,11,714	90,49,628	44,86,267	4·22	41,04,705	7,330	+ 3,74,482	...	...	209	50·43
1903	10,98,96,302	80,86,118	40,92,942	3·73	41,85,502	2,062	— 94,622	...	...	180	49·35
1904	11,22,85,779	82,90,712	41,48,862	3·70	42,59,767	...	— 1,10,905	...	...	183	49·96

6 (*g*) Gwalior Light railway (2′ 0″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles	Miles.		Miles.
Gwalior to Sipri	...	2-12-99	73·81		1899 to 1903	126
Gwalior to Bhind	...	2-12-99	52·33			
Gwalior to Jaora Alapur	2-10-01	1-1-04	31·34		1904	183
Jaora Alapur to Sabalgarh		1-12-04	26·05			
Total open mileage	...	...	...	183·53		
Line under construction or sanctioned for construction.						
Sabalgarh to Shinpur	9-2-04	...	68·60	...		
Total mileage under construction	...	...	...	68·60		
Grand Total	...	...	...	252·13		

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. flat-footed steel rails, 24 feet long, laid on sal and steel trough sleepers, Indian State railway pattern, 9 to a rail.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing.—The line is fenced between Gwalior and Morar only.

Curves.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (y)}}$. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*concld.*

6 (*y*) Gwalior Light railway (2′ 0″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions of the agreement are as follows :—

Government aid.—Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract.—Either party may determine the agreement by giving three months' notice.

Terms of working.—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments for station and train staff, audit clerks, on printing and stationery and stores consumed and all other expenses connected therewith and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the Light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal *plus* 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares.—Rates and fares are the same as those in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,166	...	...	...	...	...
1897	1,03,552	...	...	...	...	...
1898	9,80,815	...	...	...	...	...
1899	22,79,267	4,094	—4,113	...	6	258·32
1900	27,10,557	84,617	—137	...	13	100·16
1901	31,07,277	82,227	—520	...	13	100·63
1902	39,77,104	1,09,577	9,346	0·33	17	91·47
1903	41,76,953	1,66,002	68,226	1·63	25	58·90
1904	46,62,993	1,63,284	52,501	1·13	22	71·36

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. MADRAS RAILWAY SYSTEM—

Lines comprising system.—The Madras railway system is made up of—

		Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Madras railway	(5′ 6″ gauge)	904·01	...	904·01
(*b*) Kolar Gold-fields railway	(5′ 6″ gauge)	9·88	...	9·88
(*c*) Madras (North-East line), (Southern section of the East Coast (State) railway)	(5′ 6″ gauge)	497·19	0·85	498·04
(*d*) Nilgiri (State) railway	(3′ 3¾″ gauge)	16·99	11·50	28·49
(*e*) Shoranur-Cochin railway	(3′ 3¾″ gauge)	64·75	...	64·75
(*f*) *Ashikal-Mangalore Extension*	(5′ 6″ *gauge*)	...	77·27	77·27
(*g*) *Salem-Attur railway*	(5′ 6″ *gauge*)	...	36·06	36·06
(*h*) *Morappur-Dharmapuri railway*	(2′ 6″ *gauge*)	...	18·36	18·36
(*i*) *Tirupatiur-Krishnagiri railway*	(2′ 6″ *gauge*)	...	25·43	25·43
	Total	1,492·82	169·47	1,662·29

Running powers—

Foreign lines over Home line—

		Miles.
Bengal-Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)	for passenger and goods trains.	4·97
Southern Mahratta railway, Tadepalli to Bezwada		2·97
Nizam's Guaranteed State railway, distant signal at Bezwada to Bezwada station		0·89
		8·83

The Madras railway runs from Madras to Arkonam, where it divides into two branches—one proceeding in a north-westerly direction to Raichur, the other in a south-westerly direction to Azhikal. The latter has branches to Ranipet, Bangalore, Mettupalaiyam and Palghat.

The main line commenced originally at Rayapuram, but on the opening of the length between Veyasarpaudy Junction and the Central station this became a portion of the main line, and the old line from the junction to Rayapuram was then treated as a branch. The line from Bangalore Cantonment to Bangalore City was constructed as a part of the Mysore State railway, but was subsequently made over to the Madras Railway Company. The portion from Gudur to Nellore which was laid originally on the 3′ 3¾″ gauge was converted to 5′ 6″ gauge, on the opening of the East Coast State railway. The working of the East Coast State railway (North-East line) was taken over by the Madras Railway Company from the 1st January 1901.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (a) Madras railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
SOUTH-WEST LINE—			Miles.	Miles.		Miles.	
Main line—							
Madras to Veyasarpandy		7-4-73	2·16		1856	65	
Veyasarpandy to Walajah Road	April 1868	1-7-56	68·22		1857	80	
Walajah Road to Katpadi	Veyasarpandy	7-5-57	14·96		1858	96	
Katpadi to Gudiyattam	to Arkonam,	19-5-58	15·36		1859	96	
Gudiyattam to Ambur	between July	16-1-60	17·01		1860	136	
Ambur to Vaniyambadi	1853 and Feb-	1-2-60	9·98				
Vaniyambadi to Tirupattur	ruary 1854;	23-5-60	14·19		1861	296	
Tirupattur to Salem		1-2-61	69·98		1862	447	
Salem to Sankaridrug	Arkonam to	1-12-61	23·68		1863	447	
Sankaridrug to Podanur	Kadalundi,	12-5-62	71·18		1864	569	
Podanur to Pattambi	between	14-4-63	64·96		1865	609	
Pattambi to Kuttippuram	February	23-9-61	11·50				
Kuttippuram to Tirur	1854 and	1-5-61	9·39		1866	643	
Tirur to Kadalundi	May 1857.	12-3-61	16·31		1867	643	
Kadalundi to Calicut	August 1864	2-1-88	9·25		1868	676	
Calicut to Badagara		1-10-01	28·95		1869	705	
Badagara to Tellicherry		1-5-02	14·78		1870	751	
Tellicherry to Cannanore	6-5-97	20-5-03	11·32				
Cannanore to Azhikal		15-5-04	4·10		1871	830	
					1872	830	
Total main line	...	...	...	472·73	1873		
Branches—							
Rayapuram branch—					to	858	
Veyasarpandy to Rayapuram	9-6-53	1-7-56	2·16		1881		
Rayapuram to Beach	16-12-99	22-1-00	1·03		1882	861	
					1883	861	
Ranipet Branch—			3·19		1884	861	
					1885	861	
Walajah Road (Arcot) to Ranipet	9-12-97	17-4-99	4·17		1886	860	
					1887	827	The decrease in open mileage in 1887 was due to the transfer of the Bellary branch (Guntakal to Bellary) to the Southern Mahratta railway.
Bangalore branch—							
Jalarpet Junction to Bangalore Cantonment	1862	1-8-64	84·37		1888		
Bangalore Cantonment to Bangalore City	March 1881	1-7-82	3·05		to	839	
					1898		
			87·42		1899	843	
Nilgiri branch—					1900	844	
Podanur Junction to Coimbatore	17-8-70	1-2-73	3·78				
Coimbatore to Mettupalaiyam		31-8-73	21·97		1901	873	
					1902	888	
			25·75		1903	900	
Palghat branch—					1904	904	
Olavakkot to Palghat	4-1-87	2-1-88	2·47				
Total branches	...	...	...	123·00			
TOTAL, SOUTH-WEST LINE	...	...	...	595·73			
NORTH-WEST LINE—							
Main line—							
Arkonam to Nagari	23-6-59	4-3-61	17·27				
Nagari to Puttur	23-6-59	8-12-61	9·59				
Puttur to Renigunta	& 3-1-69	15-9-62	14·46				
Renigunta to Reddipalle	31-1-61	1-10-64	38·02				
Reddipalle to Cuddapah	& 26-5-63	1-9-65	39·59				
Cuddapah to Muddanuru	26-5-63 & 18-11-63	1-8-66	34·31				
Muddanuru to Tadpatri	18-11-63, 20-7-63 & 22-7-65	1-9-68	32·07				
Tadpatri to Gooty	8-5-65 & 22-7-65	1-8-69	29·72				
Gooty to the Tungabhadra river	8-5-65, 24-5-65 & 25-5-66	12-12-70	75·33				
Tungabhadra to Raichur	22-6-66 & 23-8-69	15-3-71	17·92				
TOTAL, NORTH-WEST LINE	22-9-69	...	...	308·28			
TOTAL OPEN MILEAGE, MADRAS RAILWAY PROPER	...	...	...	904·01			
DOUBLE LINE, SOUTH-WEST LINE—							
Washermenpet to Veyasarpandy	21-3-01	14-9-01	1·02				
Madras to Veyasarpandy Junction	Probably	7-4-73	2·16				
Veyasarpandy Junction to Perambur	71—72	7-2-74	1·30				
Perambur to Avadi		1-5-77	9·54				
Avadi to Tiruvallur	Probably	20-7-77	12·89				
Tiruvallur to Arkonam	73—76	28-8-77	16·52				
TOTAL DOUBLE LINE, SOUTH-WEST LINE	...	...	43·43				

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*a*) Madras railway proper (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line was laid originally with double-headed iron rails, weighing 65 to 84 lbs. per yard, on jungle wood sleepers. The latter were found to be very short lived and have been replaced by cast iron pot sleepers which have since been the accepted standard. The iron rails from Madras to 189th mile were renewed with 75-lb. doubled-headed steel rails and afterwards other sections with 75-lb., 76-lb. and 80-lb. bull-headed steel rails. The present type of permanent-way for the main line is 80-lb. bull-headed steel rails, 30 ft. long, laid on 11 pairs of cast iron pots, each weighing 112 lbs. The section, Calicut to Azhikal, is laid with 60-lb. flat-footed steel rails, 30 ft. long, on wooden sleepers, 11 to a rail.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout with aloe and wire fence and, in some big cuttings, with rough stone.

Curves.—The sharpest curve is of 700 feet radius, 0·019 mile long, between Rayapuram and Beach.

Gradients.—The ruling gradient between Madras and Mallapuram is 1 in 200; between Mallapuram and Calicut, 1 in 100 (except at Mallaparam Ghât where it is 1 in 70 and at Walayar Ghât where it is 1 in 62); between Calicut and Cannanore, 1 in 150; between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghât where it is 1 in 66); between Podanur and Mettupalaiyam, 1 in 80; between Olavakkot and Palghat, 1 in 106; between Walajah Road and Ranipet, 1 in 150 and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghât where it is 1 in 66).

Terms of contracts—

The Madras railway is worked under the following contracts:—

Contracts of—22nd December 1852 (South-West line).

19th December 1855 (South-West line).

13th August 1858 (North-West line).

2nd January 1871 (Amalgamation).

18th January 1901 (Calicut-Azhikal extension).

1st November 1901 (Walajah Road (Arcot)-Ranipet branch.)

The general conditions of the contracts are as follows:—

Government aid.—Guarantee of interest in sterling at 5 per cent. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land also was provided free of cost.

Currency of contracts.—In ninety-nine years from 1st April 1857, the line reverts to Government on paying for the rolling-stock at its fair value: provided the Company had not previously given notice terminating the contract. Government may determine the contract by purchase within six months after the expiration of 25 or 50 years of the term, at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fails to observe its obligations, Government repaying the capital expended.

NOTE.—Government relinquished their right to determine the contract at the end of the 25th year and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

Power of Company to surrender contract.—The Company may surrender, on six months' notice, at any time, receiving back the capital expended.

Terms of working.—As to the lines covered by the contract of 2nd January 1871. After deducting the working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work, subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) the surplus profits, after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1*s.* 10*d.* per rupee are divided equally between Government and the Company. As to the Calicut-Azhikal railway, working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901, the covenants and provisions of the several principal Indentures apply to the Calicut-Azhikal railway.

Rates and fares.—Under the contract, Government fixed maxima rates and fares which cannot be altered by Government, until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

APPENDIX 38—*contd.*

History of railways constructed and in progress

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Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*a*) Madras railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Guaranteed Interest (at current rates of exchange).	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	11,45,68,493	66,26,486	20,75,170	1·81	57,04,205	...	—36,29,035
1880	11,39,78,220	61,62,546	19,57,137	1·73	57,16,332	...	—37,59,195
1881	11,40,07,808	63,11,312	20,75,856	1·82	57,16,365	...	—36,40,509
1882	11,39,69,608	69,18,371	25,70,841	2·25	56,89,011	...	—31,18,170
1883	11,39,92,074	66,31,909	25,26,549	2·22	57,08,416	...	—31,81,867
1884	11,42,51,164	71,41,318	29,35,687	2·57	64,23,432	...	—34,87,745
1885	11,50,33,160	76,57,993	32,79,168	2·85	67,36,206	...	—34,57,038
1886	11,59,81,297	79,66,097	32,29,243	2·78	71,24,952	...	—38,95,709
1887	11,40,70,190	81,72,585	28,80,029	2·52	73,20,207	...	—44,40,178
1888	11,53,78,656	85,31,054	35,21,615	3·05	76,23,851	...	—41,02,236
1889	11,63,84,605	91,10,894	37,38,421	3·21	76,69,934	...	—39,31,513
1890	11,79,84,234	95,06,184	45,21,480	2·83	68,85,958	...	—23,64,478
1891	11,89,52,099	93,44,638	39,06,529	3·28	73,92,186	...	—34,85,657
1892	11,97,71,835	96,24,670	42,92,133	3·58	83,62,369	...	—40,70,236
1893	12,03,89,499	1,05,05,036	54,21,742	4·50	84,82,732	...	—30,60,990
1894	12,05,25,315	1,03,21,012	49,47,863	4·10	96,56,469	...	—47,08,606
1895	12,08,91,797	1,12,08,407	58,10,310	4·80	96,17,435	53,195	—38,60,320
1896	12,11,52,091	1,08,80,251	53,85,291	4·44	89,92,684	...	—36,07,393
1897	12,15,01,808	1,14,65,314	59,32,565	4·92	84,81,597	91,135	—25,90,167
1898	12,22,69,990	1,07,20,488	54,12,657	4·43	82,40,191	90,546	—29,18,080
1899	12,34,93,025	1,05,45,102	50,16,254	4·06	80,58,144	...	—30,41,890
1900	12,62,82,389	1,13,39,222	53,70,820	4·25	81,24,701	...	—27,52,881
1901	13,13,51,379	1,14,86,803	57,35,603	4·40	83,15,733	...	—25,80,130
1902	13,50,23,683	1,18,41,074	57,91,420	4·29	84,41,464	...	—26,50,044
1903	13,64,08,517	1,26,21,022	55,67,864	4·08	84,39,831	...	—28,71,967
1904	13,71,10,000	1,37,65,064	62,73,185	4·57	86,30,058	...	—23,56,923

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	
1856	75	51·66
1857	91	47·13
1858	93	55·53
1859	122	60·35
1860	117	73·59
1861	91	71·06
1862	84	74·02
1863	110	68·57
1864	133	49·62
1865	145	45·09
1866	147	45·62
1867	153	43·47
1868	161	41·48
1869	171	49·16
1870	146	52·64
1871	139	51·27
1872	143	52·19
1873	157	56·94
1874	152	64·67
1875	144	70·23
1876	139	64·38
1877	225	59·26
1878	148	76·05
1879	148	68·68
1880	138	68·24
1881	141	67·11
1882	155	62·84
1883	148	61·90
1884	160	58·89
1885	171	57·18
1886	178	59·46
1887	189	64·76
1888	195	58·72
1889	209	58·97
1890	218	52·44
1891	214	58·20
1892	221	55·40
1893	241	48·39
1894	237	52·06
1895	257	47·55
1896	249	50·50
1897	263	47·65
1898	246	49·51
1899	240	52·43
1900	254	51·75
1901	253	49·63
1902	256	50·25
1903	261	55·88
1904	293	54·43

7 (*b*) Kolar Gold-fields railway (5′ 6″ gauge).

The line was constructed by the Mysore state in order to provide facilities for the gold-fields.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Bowringpet to Marikuppam	July 1892	1-6-94	9·88	9·88

Details of construction—

Permanent-way.—The line was originally laid with Madras railway second-hand double-headed 75-lb. iron rails on new cast iron pot sleepers, but in consequence of the excessive wear due to the heavy traffic passing over this branch, the alignment has been improved and the iron rails have been replaced by 76-lb. bull-headed steel rails.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 66.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*b*) Kolar Gold-fields railway (5′ 6″ gauge)—*concld.*

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows :—

Government aid.—The line is the property of the Mysore state.

Currency of agreement.—The agreement to remain in force, subject to six months' notice from either side on the 30th of June or the 31st of December of any year.

Terms of working.—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line bear to the gross earnings of that system and 5 per cent. of the gross earnings of the railway for rolling-stock.

Rates and fares.—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	27,661	...	...	...	...	...
1893	5,27,634	...	...	...	...	...
1894	6,56,175	75,771	29,273	4·46	249	61·37
1895	6,61,654	1,52,953	66,379	10·03	294	56·60
1896	7,45,004	1,53,317	63,257	8·50	299	59·25
1897	7,91,074	2,08,854	90,278	11·41	402	56·77
1898	8,09,537	2,04,002	82,138	10·15	392	59·82
1899	10,79,552	1,77,667	56,827	5·27	342	68·01
1900	10,77,901	2,08,892	67,098	6·22	402	67·88
1901	11,20,330	2,17,661	91,877	8·20	421	57·79
1902	11,38,480	2,16,629	84,864	7·45	422	60·83
1903	11,62,504	2,07,257	75,237	6·47	403	67·70
1904	11,73,128	2,44,744	89,230	7·61	476	63·54

7 (*c*) Madras (North-East line) railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.	Remarks.
Main line—			Miles.	Miles.		Miles.	
Washermenpet to Ennur.	August 1894	22-2-96	8 25		1893	166	Mileage open includes Northern section of the East Coast (State) railway up to 1900 after which it was amalgamated with the Bengal-Nagpur Railway.
Ennur to Gudur	July 1895	22-2-97	75·25		1894	354	
Gudur to Nellore		1-11-98	23·75		1895	427	
Nellore to Kistna Canal Junction		20-12-97	155·00				
Kistna Canal Junction to Bezwada		15-7-98	3 06		1896	512	
Bezwada to Kovvur		20-2-93	88·24		1897	547	
Kovvur to Rajahmundry		6-8-00	4·69		1898	727	
Rajahmundry to the Junction point near Waltair	July 1890	15-7-93	119·80		1899	803	
Simachellam Junction point near Waltair station to Waltair 3′ 3½″ gauge.		15-7-93	4·25		1900	868	
Tadepalli to Bezwada		1-1-94	2·97		1901	497	The line from Gudur to Nellore was originally on the 3′ 3½″ gauge, but was converted to, and opened on, the 5′ 6″ gauge on the 1st November 1899.
Total Main line	...	...	...	485·26	1902	497	
Branches—					1903	497	
Samalkot Junction to Cocanada port branch	July 1890	15-7-93	9·75		1904	497	
Waltair to end of branch near Vizagapatam station		15-7-93	2·18				
Total Branches	...	...	...	11·93			
TOTAL OPEN MILEAGE, MADRAS (NORTH-EAST LINE)	...	...	...	497·19			
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—							
Korukkupettai to Basin Road	11th April 1901	...	0·85	0·85			
GRAND TOTAL	...	...	...	498·04			
DOUBLE LINE—							
Simachellam junction point near Waltair station to Waltair	...	...	4 25				

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*c*) Madras (North-East line) railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75lb. flat-footed steel rails, 30 feet long, laid on wooden and pea-pod steel sleepers, 11 to a rail.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced only in the vicinity of towns, stations and level crossings.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair, 1 in 150.

Terms of contract—

The line is worked under the following contract:—

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the contract are as follows:—

Currency of contract.—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is terminated for any reason under the provisions thereof prior to the expiry of the term of this contract the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April 1904, or on the 1st April of any subsequent year.

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working.—The working expenses of the State railway are to include per half-year any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following:—

The actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way," "Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters."

The share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway.

The allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras.

The expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders.

The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Government have reserved the power to require at six months' notice the retransfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1890	3,79,490	...	...	...	7,590	—7,590	...	...	The figures prior to 1901 relate to the whole of the East Coast (State) railway.
1891	1,10,69,894	...	...	...	2,33,786	—2,33,786	...	...	
1892	2,60,11,131	...	...	...	7,41,621	—7,41,621	...	...	
1893	3,58,67,478	4,98,660	1,53,732	0·43	13,48,868	—11,95,136	68	84·69	
1894	4,39,47,727	14,80,678	1,50,921	0·34	15,92,909	—14,41,988	98	89·81	
1895	5,09,41,876	19,04,251	3,29,184	0·65	19,12,886	—15,83,702	90	82·71	
1896	6,33,64,948	24,66,573	5,39,901	0·85	23,72,875	—18,32,974	94	77·96	
1897	7,22,26,070	29,21,162	8,92,453	1·23	26,96,796	—18,44,343	100	69·59	
1898	8,24,02,269	28,10,742	6,69,831	0·81	30,98,828	—24,28,997	94	76·46	
1899	6,65,93,097	43,92,237	15,37,294	1·78	35,14,602	—19,77,308	104	65·11	
1900	8,80,71,731	64,04,543	26,54,794	3·01	34,46,555	—7,91,761	143	56·10	
1901	6,07,27,375	45,68,155	20,31,210	3·34	24,51,072	—4,19,862	176	65·62	
1902	6,16,39,605	45,46,351	16,19,128	2·62	24,46,187	—8,27,059	177	64·39	
1903	6,33,83,510	45,18,656	15,53,337	2·45	24,82,162	—9,28,825	176	65·62	
1904	6,46,95,839	50,46,367	15,61,875	2·43	25,44,580	—9,82,705	196	69·03	

7 (*d*) Nilgiri (State) railway (3′ 3⅜″ gauge).

The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000 and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894; and in February 1896 a new Company was formed to purchase the line from the old Company and to supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 on the 1st January 1903.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*contd.***

7 (*d*) Nilgiri (State) railway (3′ 3⅜″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mettupalaiyam to Coonoor	Probably in 1892.	15-6-99	16·99	...	1899 to 1904	1
Total open mileage	...	...	...	16·99		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Coonoor to Ootacamund	6-11-03	Probable date 1-4-07	11·50	11·50		
Grand Total	...	...	...	28·49		

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lb. to the yard, 28·14 feet long, laid on pyinkado sleepers. Between Kallar and Coonoor, there is also a central rack rail with channel bars.

Ballast.—The line is ballasted with clean broken granite.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 318 feet radius, 153 feet long, between chains 44·94½ and 47·19 at mile 15¾.

Gradient.—The ruling gradient is 1 in 12·5.

Terms of contract—

The railway is worked by the Madras Railway Company under the following terms (approved in Government of India letter No. 563 R. T., dated the 27th June 1903).

Government aid.—The line is the property of the State.

Currency of agreement— } The agreement may be terminated at any time on six months' notice from either
Power to determine agreement— } party.

Terms of working.—The Nilgiri (State) railway to pay actual outlay on Engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working, the Madras railway to receive 25 per cent. of gross earnings *plus* 10 per cent. of the net receipts.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital expenditure to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
1890	67,850	...	...	...	...	...	...	...	...	...	...
1891	2,89,134	...	...	...	...	...	...	...	...	...	...
1892	8,89,751	...	...	...	...	...	...	...	...	...	...
1893	15,50,000	...	...	...	...	...	...	...	...	...	...
1894	18,50,000	...	...	...	...	...	...	...	...	...	...
1895	22,60,000	...	...	...	...	...	...	...	...	...	...
1896	18,92,610	...	...	...	...	...	...	...	...	...	...
1897	26,84,977	...	...	...	...	...	...	...	...	...	...
1898	44,54,085	...	...	...	...	...	...	...	...	...	...
1899	47,89,944	84,448	20,209	0·42	24,392	44,600	0·93	...	...	175	76·06
1900	48,95,490	1,76,032	86,642	1·77	23,006	1,19,648	2·44	...	...	200	42·83
1901	48,74,254	2,41,336	1,37,383	2·83	...	1,37,883	2·83	...	...	275	42·87
1902	49,08,431	3,09,063	1,12,111	2·28	...	1,12,111	2·28	...	...	332	63·73
1903	35,24,265	2,74,905	73,988	2·10	...	66,162	2·10	1,65,497	−91,509	311	73·09
1904	35,84,423	2,90,129	66,162	1·85	...	66,162	1·85	1,33,394	−67,222	328	77·20

7 (*e*) Shoranur-Cochin railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Shoranur to Ernakulam	28-4-99	2-6-02	64·75	64·7

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 7}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

7 (*e*) Shoranur-Cochin railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails, 30-feet long, on wooden sleepers, 11 to a rail.

Ballast.—The line is ballasted throughout with stone and sand, chiefly the former.

Fencing.—The line is fenced in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is of 0818·57 feet radius, 1,254 feet long, near Ponnani bridge.

Gradients.—The ruling gradient is 1 in 80.

Terms of contract—

The Shoranur-Cochin railway is worked under the following agreement:—

Agreement of—1st January 1901 (between His Highness the Raja of Cochin and the Madras Railway Company) for construction and working.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Cochin state.

Currency of agreement.—This agreement is to remain in force until the termination of the agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.

Terms of working.—The Company charges for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Durbar and the Madras Railway Company in the proportion of four-fifths to the Durbar and one-fifth to the Company.

Rates and fares.—The same as are generally applicable from time to time to the system of railways worked by the Company.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Table I. Gross earnings.	Table I. Net earnings.	Table I. Per cent. on capital outlay.	Table II. Earnings per mile per week.	Table II. Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	53,921	...	...	...	...	...
1899	80,927	...	...	...	...	...
1900	28,47,394	...	...	...	...	...
1901	50,82,250	...	...	...	...	...
1902	65,66,301	1,34,845	73,299	1·15	69	45·64
1903	64,41,390	3,52,964	1,96,023	3·07	105	43·90
1904	67,88,610	3,92,782	1,94,244	2·86	117	50·55

7 (*f*) Azhikal-Mangalore railway (5′ 6″ gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Azhikal to Mangalore	28-6-01	Probable date. 1-1-07	Miles. 77·27	Miles. 77·27

7 (*g*) Salem-Attur railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Salem to Attur	16-9-03	...	Miles. 36·06	Miles. 36·06

The commencement of work has not yet been authorised on this line.

7 (*h*). Morappur-Dharmapuri railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Morappur to Dharmapuri	24-10-02	Probable date. 30-6-05	Miles. 18·36	Miles. 18·36

7 (*i*) Tirupattur-Krishnagiri railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Tirupattur to Krishnagiri	24-10-02	...	Miles. 25·43	Miles. 25·43

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 8}{\text{Sub-head } (a)}$. **NAGDA-MUTTRA (SOUTHERN SECTION) RAILWAY** (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Nagda to the crossing of the Chambal river	29-11-04.	Probable date. April 1906.	141·52.	141·52.

The line is under construction by the State.

Number $\frac{\text{Main head } 9}{\text{Sub-heads } (a) \text{ to } (c)}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—**

Lines comprising system.—The Nizam's Guaranteed State railway system is made up of—

	Open line. Miles.
(*a*) Nizam's Guaranteed State railway (5′ 6″ gauge)	330·13
(*b*) Bezwada Extension railway (5′ 6″ gauge)	20·58
(*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)	391·13
TOTAL	741·84

Running powers—

Home line over Foreign line :—

Distant signal at Bezwada to Bezwada station, Madras (North-East line), for passenger and goods trains . . 0·39

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884, it was worked by State agency, and from January 1885, by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast State railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast State railway. It was transferred back to the Company for working from the 1st January 1901.

8 (*a*) **Nizam's Guaranteed State railway proper** (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Main line—							
Wadi junction to Secunderabad	25-3-71	9-10-74	109·92		1874 to 1885	121	The length from Secunderabad to Hyderabad is on the mixed (5′ 6″ and 3′ 3⅜″) gauge.
					1886	204	
Secunderabad to Hyderabad			5·53		1887	205	
Junction of new line to Warangal	Nov. '84	8-4-86	87·47		1888	306	
Warangal to Dornakal	May '86	1-1-88	51·91		1889	390	
Dornakal to Bona Kalu	Jany. '87	5-8-88	31·72		1890 to 1892	333	
Bona Kalu to the British frontier		10-2-89	23·54		1893 to 1897	332	
					1898 to 1904	330	
Total main line	...	...	...	310·09			
Branches—							
Hyderabad branch—							
Hussain Sagar to Hyderabad	25-3-71	9-10-74	3·54				
Mineral branch—							
Dornakal to Singareni Coal-fields	May '86	1-1-88	16·50				
Total branches	...	...	...	20·04			
GRAND TOTAL	...	...	...	330·13			

Details of construction—

Permanent-way.—The first 47 miles from Wadi are laid with 75 lb. bull-headed steel rails, 30 feet long, on cast iron pot sleepers; and the following 9 miles with 68 lb. double-headed steel rails, 30 feet long on cast iron pot sleepers. The remainder of the line is laid with 66½ lb. flat-footed steel rails, 30 feet long, on steel pea-pod sleepers with the exception of the mixed (5′ 6″ and 3′ 3⅜″) gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail. There are 10 sleepers to a rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced with a wall, and in parts with wire, from Wadi to Nawandgi, mile 33; from there with wire to Secunderabad, mile 121; but from Secunderabad to the frontier, only the station yards are fenced with wire.

Curves.—The sharpest curve is of 1300 feet radius. There are 13 such curves of different lengths.

Gradients.—The ruling gradient is 1 in 100.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM**—*contd.*

9 (*a*) Nizam's Guaranteed State railway proper (5′ 6″ gauge)—*concld.*

Terms of contract—

The railway is worked under the following contract:—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Terms of contract.—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon), His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land was provided free of charge.

Currency of contract.—The contract is current for a period of 99 years, and on expiry by effluxion of time, the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by the Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working.—From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the annuity paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance, one-half will be paid to the Nizam's Government, the remaining half being made over to the Company.

Rates and fares.—The rates and fares not to be, unless otherwise agreed between His Highness' Government and the Company, in excess of the rates and fares which were in existence on the Great Indian Peninsula railway at the time the contract was made.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. (Includes Bezwada Extension.) Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	1,16,46,937	6,94,401	89,925	0·77	110	87·01
1880	1,21,90,870	7,02,716	2,48,604	2·04	112	68·08
1881	1,22,85,291	7,36,834	2,88,666	2·35	120	61·32
1882	1,22,27,794	8,59,418	3,75,099	3·07	141	56·35
1883	1,22,83,560	8,53,521	2,37,932	1·94	137	72·12
1884	1,23,08,720	9,72,917	4,70,227	3·82	155	63·02
1885	2,05,60,998	11,13,950	4,87,024	2·37	178	56·26
1886	2,71,49,312	13,81,077	6,94,524	2·56	143	49·71
1887	2,69,71,143	15,48,891	5,52,905	2·05	143	64·31
1888	3,55,11,854	17,76,075	7,57,467	2·13	116	57·35
1889	3,59,46,922	22,57,462	7,72,513	2·15	129	66·90
1890	3,77,11,194	25,07,268	10,39,590	2·76	140	59·74
1891	3,95,18,791	27,76,437	12,57,860	3·18	151	54·70
1892	3,95,48,395	27,80,642	13,24,959	3·35	151	52·35
1893	4,01,96,909	30,61,605	14,36,451	3·57	136	53·08
1894	4,02,33,826	32,56,885	16,22,028	4·03	177	50·20
1895	4,06,43,818	32,15,541	15,77,149	3·88	185	53·77
1896	4,08,24,737	33,03,523	17,28,196	4·24	187	50·02
1897	4,09,60,944	36,10,254	19,38,769	4·73	205	48·67
1898	4,10,54,449	39,07,612	22,74,550	5·54	221	44·20
1899	4,15,68,731	41,10,201	25,01,046	6·02	240	43·45
1900	4,17,49,124	49,12,056	284,1,985	6·81	286	41·52
1901	4,24,30,543	40,77,927	26,48,120	6·24	236	35·89
1902	4,26,89,527	44,06,494	26,82,533	6·25	254	39·89
1903	4,30,13,663	43,18,630	25,38,386	5·90	251	41·79
1904	4,32,66,412	43,32,440	27,90,690	6·47	252	36·18

9 (*b*) Bezwada Extension railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Hyderabad frontier to Bezwada	26-11-86	10-2-89	20·58	20·58

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM**—*contd.*

9 (*b*) Bezwada Extension railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 66½ lb. flat-footed steel rails, 30 feet long, on steel pea-pod sleepers, 10 to a rai except for 6 miles where there are 11 sleepers to a rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced with wire only at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The line is maintained and worked for the same percentage of its gross earnings as the aggregate working expenses of the amalgamated undertaking of the 5′ 6″ gauge system bear to the aggregate gross earnings for the same half-year, *plus* 5 per cent. of the gross earnings of the Bezwada extension railway for the use of rolling-stock, and the cost of Government Audit establishment and interest on joint works at Bezwada.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1887	8,11,654	...	...	...	16,363	—16,363		
1888	11,56,237	...	...	...	39,357	—39,357		
1889	13,46,302	76,671	16,326	1·21	53,530	—37,204		
1890	13,90,830	74,734	16,318	1·17	54,330	—38,212		
1891	14,11,077	87,367	29,699	2·03	56,266	—27,567		
1892	14,17,674	98,779	28,347	2·00	56,584	—28,237	Included with the Nizam's Guaranteed State railway proper.	
1893	14,21,456	1,08,386	33,972	2·39	56,888	—22,916		
1894	14,26,901	1,71,016	71,276	5·00	57,122	+14,148		
1895	14,31,642	95,119	95,119	6·64	57,239	+37,880		
1896	14,35,588	73,057	38,496	2·68	57,406	—18,910		
1897	14,95,418	1,56,800	56,645	3·79	58,383	—1,738		
1898	15,01,343	1,69,061	95,390	6·35	59,569	+35,821		
1899	15,02,651	3,12,172	1,84,365	12·27	60,101	+1,24,264		
1900	15,02,618	3,56,446	2,38,989	15·90	60,106	+1,78,883		
1901	11,51,678	2,77,177	1,56,929	13·63	35,509	+1,21,420		
1902	11,60,425	2,89,683	1,40,329	12·08	46,375	+93,954		
1903	11,77,017	3,25,363	1,67,932	14·22	46,617	+1,20,715		
1904	11,75,731	2,93,153	1,53,358	13 04	46,898	+1,06,460		

9 (*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Manmad to Jalna	12-1-97	21-10-99	109·36	391·13	1899	154	The line between Secunderabad and Hyderabad is on the mixed (5′ 6″ and 3′ 3⅜″) gauge.
Jalna to Sailu		7-12-99	44·74		1900	385	
Sailu to Purbhani		25-4-00	26·43		1901	391	
Purbhani to Nanded		9-10-00	36·29		1902	391	
Nanded to Sivungaon		23-8-00	16·68		1903	391	
Sivungaon to Basar		25-4-00	33·89		1904	391	
Basar to Secunderabad		25-4-00	118·21				
Secunderabad to Hyderabad		16-5-01	5·53				
Total		...	...				

Details of construction—

Permanent-way.—The permanent-way consists of 50 lb. flat-footed steel rails and steel pea-pod sleepers from mile 302 to 363 and wooden sleepers for the remainder. The rails are laid on 10, 12 and 15 sleepers, in lengths of 24, 30 and 36 feet.

Ballast.—The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced with wire from mile 377¼ to 381 and at all stations.

Curves.—The sharpest curve is of 1433 feet radius. There are 4 such curves on the line.

Gradients.—The ruling gradient is 1 in 133·3.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—16th March 1897 (between His Highness the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (c)}}$. NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*concld.*

9 (*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions of the agreement are as follows :—

Terms of contract.—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition a sum of one per cent. per annum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway, and after the expiration of the guaranteed period the interest payable thereon a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is provided for.

Currency of contract.—On expiry of the contract by effluxion of time, the land, buildings, and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by the Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings are deducted working expenses, and the net earnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period, to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government the remaining moiety being dealt with as above.

Rates and fares.—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	3,74,350	...	...	...	...	...
1897	17,64,352	...	...	...	...	...
1898	86,55,416	...	...	...	...	...
1899	2,00,21,971	63,381	36,877	0·18	48	41·82
1900	2,31,94,817	10,63,023	4,20,826	1·81	70	60·41
1901	2,44,37,419	20,10,033	9,23,300	3·77	99	54·07
1902	2,57,75,220	22,82,043	9,67,892	3·76	112	57·70
1903	2,62,07,241	22,14,752	8,86,291	3·38	109	59·98
1904	2,61,85,096	22,11,781	7,74,804	2·93	109	64·97

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$. NORTH WESTERN (STATE) RAILWAY SYSTEM—

Lines comprising system.—The North Western (State) railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) North Western (State) railway (5′ 6″ gauge)	3,185·56	241·67	3,427·23
(*b*) Jammu and Kashmir (Native state section), (5′ 6″ gauge)	15·99	...	15·99
(*c*) Ludhiana-Dhuri Jakhal railway (5′ 6″ gauge)	78·66	...	78·66
(*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)	107·05	...	107·05
(*e*) Southern Punjab railway (5′ 6″ gauge)	425·33	154·00	579·33
(*f*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)	91·73	...	91·73
(*g*) Nowshera-Durgai railway (2′ 6″ gauge)	40·25	...	40·25
(*h*) Dandot Light railway (2′ 0″ gauge)	6·18	...	6·18
(*i*) *Jullundur-Kapurthalla-Sultanpur (British section)* } Gauge not yet finally settled.	...	6·80	6·80
(*j*) *Jullundur-Kapurthalla-Sultanpur (Native state section)*. }	...	22·02	22·02
Total	3,950·75	424·49	4,375·24

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

Running powers—

	Miles.
Home line over foreign line:—	
East Indian railway, Ghaziabad to Delhi, for passenger and goods trains	13·00

The first period of the contract with the Sind, Punjab and Delhi Railway Company having expired, the State assumed charge of the Undertaking on the 1st January 1886 and amalgamated it with the Punjab Northern, the Indus Valley, the Sind-Sagar, and the southern section of the Sind-Pishin (State) railways, to be worked as one Imperial system under the name of the North Western State railway. The completion and opening, on the 24th May 1883, of the Attock bridge supplied the last link in a continuous chain of railway communication from Calcutta to Peshawar, a distance of 1,555 miles.

The Wazirabad-Lyallpur branch was constructed to open up the country now being irrigated by the Chenab canal and recently brought under cultivation by the colonists and settlers, who are reclaiming the desert land of the Rechna Doab.

The Kotri-Rohri chord was constructed owing to the set of the Indus on the right bank which rendered the line along that bank dangerous, and, owing to the frequent breaches, which caused communication with Karachi to be intermittent, dislocating the export trade and cutting off communication with the North Western Frontier. The present line, which follows the left bank of the river, is on high ground and is less liable to inundation. It saves about 36·51 miles on the through distance from the Punjab to Karachi, and also gives an alternative route to Quetta.

The line from the Bolan Junction station and from the Sibi station follows the old Quetta loop to Nari Bank station 4·81 miles from Sibi and 453 miles from Karachi. The old Bolan railway (Quetta loop) from Nari Bank *vid* Kundalani to Hirok has been dismantled, except the first portion from Nari bank to Rindli. The new line is on a completely new alignment between Nari bank and Kolpur, the actual length of the construction works being 57 miles.

10 (*a*) North Western (State) railway proper (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
COMMERCIAL SECTION—							
Main line—							
Ghaziabad to Meerut City		18-4-67	27·33		1861	110	
Meerut City to Umballa Cantonment		1-1-69	121·02		1862	142	
Umballa Cantonment to Ludhiana		12-10-69	70·66		1863	142	
Ludhiana to Phillour	1864	15-10-70	8·38		1864	43	
Phillour to Jullundur Cantonment		1-4-70	24·12		1865	350	
Jullundur Cantonment to Beas		15-11-69	25·53		1866	350	
Beas to Amritsar		1-11-67	26·20		1867	403	
Amritsar to Lahore	8-2-59	10-4-62	32·30		1868	403	
Lahore to Jhelum	22-10-69	6-10-76	108·12		1869	621	The line from Lahore to Jhelum was constructed on the 3′ 3½″ gauge previous to September 1873 and was converted to the 5′ 6″ gauge on the 6th October 1876.
Jhelum to Rawalpindi	17-9-77	...	76·38		1870	668	
Rawalpindi to Haji Shah		1-1-81	61·62		1871	668	
Haji Shah to Attock bridge		1-5-81			1872	668	
Attock bridge to Khairabad	3-10-79	31-5-83	2·38		1873	668	
Khairabad to Peshawar City		1-5-81	41·25		1874	668	
Peshawar City to Peshawar Cantonment		1-1-83	2·65		1875	725	
Lahore to Mooltan Cantonment	8-2-59	24-4-65	207·82		1876	767	
Mooltan Cantonment to Muzaffarabad		31-8-70	6·89		1877	767	
Muzaffarabad to Khanpur	8-1-71	1-7-78	139·14		1878	1,208	
Khanpur to Rohri		1-7-78	132·05		1879	1,268	
Rohri to Sukkur	...	27-3-89	2·64		1880	1,541	
Sukkur to Radhan		1-10-78	79·31		1881	1,671	
Radhan to Laki	4-11-72	27-10-78	70·57		1882	1,733	
Laki to Kotri		8-10-78	75·48		1883	1,739	
Kotri to Karachi City	29-4-58	13-5-61	104·89		1884	1,850	
Karachi City to Kiamari (including Napier Mole line)	...	16-6-89	3·07		1885	1,857	
Total Main line, Commercial section, carried over.	...	...	...	1,444·70			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM**—*contd.*

10 (*a*) North Western (State) railway proper (5' 6" gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Brought forward, total main line, Commercial section.	...	...	...	1,444·70			
					1886	1,857	
COMMERCIAL SECTION—*concld.*							
Branches—					1887	2,398	
Sialkot Branch—							
Wazirabad to Sialkot	10-4-83	1-1-84	26·50		1888	2,432	
Kashmir Branch—							
Sialkot to the frontier of the Kashmir State.	...	15-3-90	9·08		1889	2,431	
Wazirabad-Lyallpur Branch—					1890	2,442	
					1891	2,356	The decrease in mileage open in 1891 was due to the exclusion of the old Quetta loop, 90½ miles, which was under reconstruction.
Wazirabad to Hafizabad	...	15-8-95	37·37				
					1892	2,427	
Hafizabad to Sangla Hill	...	1-1-96	81·45				
					1893	2,427	
Sangla Hill to Lyallpur	...	15-2-96	27·21				
					1894	2,429	
Lyallpur to Toba Tek Singh	...	22-6-99	49·00				
					1895	2,471	
Toba Tek Singh to Khanewal	...	16-4-00	55·53				
					1896	2,708	
			200·56				
					1897	2,811	
Puranadera branch—							
Phulji to Puranadera	...	1-5-82	2·57				
					1898	2,812	
Phulji branch extension	...	31-3-02	0·34				
					1899	2,923	
			2·91				
					1900	3,000	
Sukkur Bandar branch—							
Sukkur to Sukkur Bandar	...	1-10-78	1·25				
					1901	3,071	
Kotri Bandar branch—							
Kotri to Kotri Bandar	...	1-4-89	1·14				
					1902	3,078	
Mecan Meer chord branch—							
Mecan Meer East to Mecan Meer West	...	10-12-91	2·13		1903	3,124	The Mecan Meer Chord branch is a military line and not intended to be used for ordinary public traffic.
Kotri-Rohri (chord) branch—					1904	3,185	
Kotri to Hyderabad	...	25-5-00	4·99				
Hyderabad to Rahoki	...	28-3-01	6·04				
Rahoki to Shahdadpur	...	15-11-96	39·09				
Shahdadpur to Rohri	...	15-11-96	139·84				
			189·96				
Lower Sind extension—							
Hydorabad to Badin	15-5-03	15-10-04	61·83				
Ferozepore branch—							
Baewind to Kasur	9-11-82	15-4-83	16·50				
Kasur to Ganda Singhwala		10-6-83	7·00				
Ganda Singhwala to Ganda Singh Bandar	2-10-83	15-12-83	5·50				
Ganda Singh Bandar to Hussainiwala	...	8-5-87					
Hussainiwala to Ferozepore City	...	1-10-92	2·00				
Ferozepore City to Ferozepore Cantonment	29-10-81	1-10-88	2·00				
Ferozepore Cantonment to Bhatinda	...	15-6-99	54·36				Of the length between Ferozepore Cantonment and Bhatinda, 26·28 miles, from Kotkapura to Bhatinda, are of mixed (5' 6" and 3' 3½") gauge.
Hussainiwala to Ferozepore Cantonment	...	8-5-87	3·50				
			90·86				
Pathankot branch—							
Amritsar to Dinanagar	6-12-81	1-1-84	51·22				
Dinanagar to Pathankot		8-6-84	15·48				
			66·70				
Jech Doab, Northern section—							
Malakwal to Sargodha	26-11-01	1-4-03	46·25				
Total Branches	...	...	...	629·17			
TOTAL OPEN MILEAGE (COMMERCIAL SECTION), CARRIED OVER	...	...	...	2,143·87			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$ **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*a*) North Western (State) railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Remarks.
			Miles.	Miles.	
Brought forward, total open mileage, Commercial section	...	...	...	2,143·87	
FRONTIER SECTION (MILITARY)—					
Main line—					
Sind-Sagar—					
Lala Musa to Baha-ud-din	24-7-77	1-1-80	28·46		The line from Lala Musa to Malakwal was originally on the 3′ 3½″ gauge, but was converted to, and opened on, the 5′ 6″ gauge on the 10th February 1886.
Baha-ud-din to Hariah		1-2-80	10·52		
Hariah to Malakwal		10-4-80	5·99		
Malakwal to Bhakkar	...	15-8-87	175·04		
Bhakkar to Chenab west bank	...	22-1-87	119·70		
Chenab west bank to Chenab east bank	...	1-2-90	2·49		
Chenab east bank to Sher Shah	...	1-1-80	2·39		
Total Main line	...	...	...	344·59	
Branches—					
Khushalgarh branch—					
Golra Junction to Langar	Sep. 1879	1-4-81	60·50		
Langar to Khushalgarh		16-4-81	9·65		
Khushalgarh, new station		18-7-83			
			70·15		
Bhera branch—					
Malakwal to Miani	24-7-77	10-4-80	8·99		The Bhera branch was originally on 3′ 3½″ gauge, but was converted to, and opened on, the 5′ 6″ gauge on the 15th March 1887.
Miani to Bhera	25-10-81	2-2-82	9·11		
			18·10		
Bhaganwalah branch—					
Haranpur to Bhaganwala	...	...	10·84		
Khewra branch—					
Chalisa Junction to Khewra salt mines	...	1-1-83	6·36		The Khewra salt branch was originally on the 3′ 3½″ gauge, but was converted to, and opened on, the 5′ 6″ gauge, from Chalisa Junction to Khewra salt mines on the 15th August 1887 and Khewra to Dandot on the 1st August 1889.
Khewra to Dandot	...		2·15		
			8·51		
Mari branch—					
Kundian to Mari	Kundian to Mianwali, 27-2-86	15-3-92	36·32		
Dera Ghazi Khan branch—					
Mahmud Kot to Ghazighat	...	1-4-87	11·27		
Mari-Attock branch—					
Cambellpore Cantonment (new station) to Basal Junction	...	1-4-99	18·45		
Jand Junction to Daud Khel	...	1-4-99	53·91		
			72·36		
Total Branches	...	...	...	227·56	
TOTAL OPEN MILEAGE, SIND-SAGAR, MILITARY SECTION	...	...	...	572·16	
Sind-Pishin—					
Rak to Sibi	Oct. 1879	2-5-80	132·25		
Sibi to Sharigh	...	20-3-87	74·30		
Sharigh to Bostan	...	28-3-87	61·13		
Base of Bostan triangle loop	...	...	0·31		
Bostan to Killa Abdulla	...	25-1-88	38·14		
Killa Abdulla to Chaman	...	1-1-92	29·40		
TOTAL, SIND-PISHIN	...	...	...	336·03	
Carried over, total open mileage — Military section	...	...	...	908·17	
Carried over, total open mileage — Commercial section	...	...	...	2,143·87	

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*a*) North Western (State) railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward, total open mileage {Commercial section	...	...	...	2,143·87
Brought forward, total open mileage {Military section	...	...	...	* 908 17
FRONTIER SECTION (MILITARY)—*concld.*				
Mushkaf-Bolan—				
Sibi (Point No. 51) to Quetta south distant signal	...	15-4-97	86·74	
Quetta loop—				
Quetta south distant signal to Bostan	...	28-8-87	20·59	
Nari bank to Rindli	...	..	13·81	
Mithri chord	...	1-1-96	1·34	
			35·74	
TOTAL, MUSHKAF-BOLAN	...	...	..	122·48
Peshawar-Jamrud branch—				
Peshawar to Jamrud	...	1-1-01	11·04	11·04
TOTAL OPEN MILEAGE, FRONTIER SECTION (MILITARY)	...	...	...	1,041·69
GRAND TOTAL, NORTH WESTERN (COMMERCIAL AND MILITARY)	...	...	...	3,185·56
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Jech-Doab, Southern section—				
Sargodha to Shorkot Road	23-9-03	...	103·14	
Quetta-Nushki section—				
From a point 12 miles south of Quetta to Nushki	6-8-02	..	88·36	
Shahdara-Sangla Chord—				
Shahdara to Sangla	15-11-04	...	55·17	
TOTAL MILES UNDER CONSTRUCTION	...	...	...	241·67
GRAND TOTAL, NORTH WESTERN STATE RAILWAY PROPER	...	...	...	3,427·23
Double line, open—				
Kiamari to Karachi City	...	30-6-97	3·06	
Karachi City to Karachi Cantonment	...	13-5-61	2·30	
Karachi Cantonment to Pipri	...	20-6-97	20·75	
Pipri to Kotri	...	3-5-98	81·89	
Mecan Meer East to Mecan Meer West	...	10-12-91	2·13	
Gulistan to Chaman	...	20-9-92	36·82	
Ab-i-Gum to Kolpur			23·54	
TOTAL DOUBLE LINE	...	...	170·49	
Double line, under construction—				
Amritsar to Lahore	24-8-04	...	32·30	
Mooltan City to Mooltan Cantonment	...	...	1·00	
TOTAL	...	...	33·30	

Details of construction—

Permanent-way.—The permanent-way is of various types. On the single line, of iron rails, there are 77·71 miles 60 lb. flat-footed; 69·98 miles, 68 lb. double-headed; 24·25 miles, 60 lb. bull-headed; 10·15 miles, 82 lb. double-headed and 3·50 miles, 68 lb. bull-headed. Of steel rails, there are 0·85 mile, 70 lb. flat-footed; 435·05 miles, 62 lb. flat-footed; 1,981·97 miles, 75lb. flat-footed; 8·25 miles, 64 lb. double-headed, 60·62 miles, 68 lb. double-headed; 92·76 miles, 75 lb. double-headed; 152·93 miles, 68 lb. bull-headed; 42·94 miles, 84 lb. bull-headed; 23·55 miles, 100 lb. flat-footed; 45·30 miles, 77½ lb. bull-headed, 114·00 miles, 73 lb. bull-headed and 41·87 miles, 85 lbs. bull-headed. On the double line, of iron rails, there are 2·13 miles 68lb. double-headed. Of steel rails there are 0·50 mile 68 lb. double-headed; 141·62 miles, 75 lb. flat-footed; 3·15 miles, 77½ lb. bull-headed and 23·54 miles 100 lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used. The rails mostly in use are 30 feet long and there are 11 sleepers to a rail.

Ballast.—The line is ballasted throughout with sand, bricks and broken stone.

Fencing.—The line is fenced with 5 strands iron wire fencing from Karachi to Ghaziabad, Ruk to Jhatpat and Lahore to Lala Musa. The line between Lala Musa and Peshawar is partially fenced.

Curves.—The sharpest curve is of 408 feet radius, 0·10 mile long, on the Sind-Pishin line.

Gradients.—The ruling gradient between Kotri and Rohri, Sibi and Ruk and Raewind and Bhatinda, is 1 in 500; between Ghaziabad and Lala Musa, Kotri and Lahore, Lyallpur and Khanewal and Malakwal and Sargodha, 1 in 400; between Karachi and Kotri, 1 in 189; between Lala Musa and Peshawar, 1 in 100; between Peshawar and Jamrud, 1 in 90; between Golra and Jand, 1 in 70 and between Jand and Khushalgarh, 1 in 50. The gradients on the Sind Sagar, Mari-Attock, Sind-Pishin and Mushkaf-Bolan lines are, 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts—

The line is owned and worked by the State.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads } (a) \text{ to } (j)}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*a*) North Western (State) railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Annuity.	Surplus profits paid to Company.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	21,67,64,247	1,51,27,621	55,35,870	2·55	1,00,29,015	...	...	−44,93,145
1880	25,05,35,401	1,00,30,066	75,55,561	3·02	1,11,36,919	...	21,122	−36,02,499
1881	26,38,39,396	90,04,725	46,13,547	1·75	1,17,64,868	...	...	−71,51,301
1882	27,49,44,670	82,43,072	57,96,011	2·11	1,05,83,712	...	...	−47,87,701
1883	29,19,15,806	1,03,81,148	67,19,243	3·09	1,07,43,931	...	...	−31,24,688
1884	29,30,27,775	1,07,68,749	86,21,631	3·02	1,16,26,701	...	...	−30,05,070
1885	31,69,43,458	1,49,78,963	1,37,44,127	4·34	1,64,86,697	...	1,25,953	−28,80,523
1886	33,88,68,533	2,53,60,901	1,19,92,839	3·54	1,14,07,148	63,00,733	...	−47,15,042
1887	36,16,43,700	2,10,03,388	57,27,585	1·60	1,01,56,779	88,30,323	...	−1,24,09,516
1888	37,80,59,528	2,57,79,305	83,66,598	2·23	1,09,18,938	63,45,756	...	−1,08,98,096
1889	38,73,09,431	2,82,06,820	1,02,84,741	2·66	1,13,76,516	85,98,709	...	−96,90,543
1890	41,54,67,180	2,73,99,035	1,02,57,601	2·47	1,16,66,565	74,54,323	...	−88,63,307
1891	41,87,30,971	3,25,78,355	1,21,33,521	2·90	1,20,67,542	80,05,290	...	−79,40,321
1892	42,71,90,670	3,64,35,665	94,50,960	2·21	1,24,25,090	69,84,076	...	−1,19,58,146
1893	43,71,03,581	3,93,68,732	97,97,643	2·24	1,27,61,682	90,98,545	...	−1,20,62,584
1894	44,76,05,925	3,23,14,097	1,28,25,181	2·86	1,24,63,279	1,03,59,245	...	−99,97,343
1895	46,29,14,462	3,53,18,382	1,64,46,996	3·55	1,35,01,193	1,03,17,385	...	−73,71,580
1896	47,81,99,892	2,94,41,740	1,18,96,499	2·49	1,42,35,427	96,43,588	...	−1,19,93,006
1897	48,79,25,286	3,20,09,449	1,49,78,897	3·07	1,45,85,298	90,50,191	...	−86,56,592
1898	49,37,11,919	3,76,01,912	1,85,74,360	3·76	1,50,41,459	96,35,949	...	−51,02,948
1899	50,01,64,031	3,63,21,759	1,69,89,223	3·22	1,50,40,208	95,61,406	...	−75,12,394
1900	50,57,26,113	3,15,22,237	1,33,19,151	2·61	1,54,25,164	95,76,682	...	−1,07,82,695
1901	51,04,27,448	4,11,69,277	2,03,56,471	3·99	1,55,50,694	96,02,222	...	−37,96,445
1902	53,53,16,084	4,22,19,927	1,73,70,994	3·31	1,59,69,580	95,81,455	...	−71,80,921
1903	53,31,87,831	4,93,83,876	2,50,08,817	4·69	1,62,88,103	95,77,430	...	+1,42,984
1904	54,52,89,823	6,16,56,310	3,32,93,909	5·93	1,67,34,709	95,77,430	...	+69,80,779

TABLE II.

Calendar year.	Sind-Punjab and Delhi, 5′ 6″		Punjab-Northern, 5′ 6″		Indus Valley and Kandahar, 5′ 6″		Amritsar-Pathankot, 5′ 6″		North Western (State),					
									Commercial section.		Military section.		Entire line.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1861	68	97·28	...	...	...	...	...	...	...	...	...	...	...	...
1862	112	79·59	...	...	...	...	...	...	...	...	...	...	...	...
1863	171	88·04	...	...	...	...	...	...	...	...	...	...	...	...
1864	170	87·36	...	...	...	...	...	...	...	...	...	...	...	...
1865	101	83·19	...	...	...	...	...	...	...	...	...	...	...	...
1866	116	76·15	...	...	...	...	...	...	...	...	...	...	...	...
1867	131	69·96	...	...	...	...	...	...	...	...	...	...	...	...
1868	112	95·69	...	...	...	...	...	...	...	...	...	...	...	...
1869	117	80·70	...	...	...	...	...	...	...	...	...	...	...	...
1870	140	76·16	...	...	...	...	...	...	...	...	...	...	...	...
1871	122	99·05	...	...	...	...	...	...	...	...	...	...	...	...
1872	134	85·77	...	...	...	...	...	...	...	...	...	...	...	...
1873	154	68·67	...	...	...	...	...	...	...	...	...	...	...	...
1874	101	55·35	...	...	...	...	...	...	...	...	...	...	...	...
1875	161	64·08	61	63·41	...	...	...	...	...	...	...	...	...	...
1876	166	67·03	101	77·27	...	...	...	...	...	...	...	...	...	...
1877	241	57·46	130	86·61	...	...	...	...	...	...	...	...	...	...
1878	234	64·59	160	99·36	56	123·97	...	...	...	...	...	...	...	...
1879	317	60·22	345	79·53	121	81·16	...	...	...	...	...	...	...	...
1880	352	55·92	360	63·25	209	71·15	...	...	...	...	...	...	...	...
1881	255	69·76	198	89·64	155	78·73	...	...	...	...	...	...	...	...
1882	285	66·00	161	63·74	141	69·17	...	...	...	...	...	...	...	...
1883	296	57·13	146	61·11	203	55·55	...	...	...	...	...	...	...	...
1884	290	61·26	139	72·34	210	60·49	67	85·79	...	...	...	...	...	...
1885	373	57·35	165	62·69	309	46·85	94	80·28	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	289	53·71
1887	...	...	...	...	...	...	...	...	...	...	...	...	183	72·73
1888	...	...	...	...	...	...	...	...	...	...	...	...	202	67·77
1889	...	...	...	...	...	...	...	...	...	...	...	...	294	67·01
1890	...	...	...	...	...	...	...	...	...	...	...	...	283	54·48
1891	...	...	...	...	...	...	...	...	...	...	...	...	344	55·60
1892	...	...	...	...	...	...	...	...	...	...	...	...	280	55·89
1893	...	...	...	...	...	...	...	...	...	...	...	...	313	60·20
1894	...	...	...	...	...	...	...	...	...	...	...	...	347	53·11
1895	...	...	...	...	...	...	...	...	...	...	...	...	379	49·79
1896	...	...	...	...	...	...	...	...	...	...	...	...	292	54·77
1897	...	...	...	...	...	...	...	...	...	...	...	...	309	49·73
1898	...	...	...	...	...	...	...	...	...	...	...	...	401	45·98
1899	...	...	...	...	...	...	...	...	...	...	...	...	366	47·73
1900	...	...	...	...	...	...	...	...	...	...	...	...	275	52·34
1901	...	...	...	...	...	...	...	...	...	...	...	...	350	45·81
1902	...	...	...	...	...	...	...	...	...	...	...	...	360	53·63
1903	...	...	...	...	...	...	...	...	...	...	...	...	421	44·40
1904	...	...	...	...	...	...	...	...	...	...	...	...	519	43·29

Calendar year.	Entire line.	
	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	
1879	...	...
1880	...	...
1881	...	...
1882	...	...
1883	...	...
1884	...	...
1885	...	...
1886	...	...
1887	...	...
1888	...	...
1889	...	...
1890	...	...
1891	...	...
1892	...	...
1893	...	...
1894	...	...
1895	...	...
1896	289	53·71
1897	183	72·73
1898	202	67·77
1899	294	67·01
1900	283	54·48
1901	344	55·60
1902	280	55·89
1903	313	60·20
1904	347	53·11
1905	379	49·79
1906	292	54·77
1907	309	49·73
1908	401	45·98
1909	366	47·73
1910	275	52·34
1911	350	45·81
1912	360	53·63
1913	421	44·40
1914	519	43·29

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main-head 10}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*b*) Jammu and Kashmir (Native state section) (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Frontier of the Kashmir state to the left bank of the Tawi river near Jammu	23-2-88	15-3-90	15·99	15·99

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar. Most of the rails are 24 and 30 feet long with 10 and 11 sleepers respectively.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced except at Sialkot station which is fenced with wall and wire fence.

Curves.—The sharpest curve is of 2,865 feet radius and 0·30 mile long.

Gradients.—The ruling gradient is 1 in 500.

Terms of contracts—

The railway is worked by the State under the following contracts :—

Contract of—14th July 1888 (between the Government of India and the Kashmir Durbar) for construction and working.

18th November 1890.—Supplementary agreement (between the Government of India and the Kashmir Durbar) relative to the provision of capital.

28th April 1898.—Memorandum of revised terms (between the Government of India and the Kashmir Durbar) for working.

Addition to the memorandum of revised terms of 28th April 1898, regarding the payment of rebate by the North Western railway approved in Government of India letter No. 471-R. T. of 21st May 1904.

The general conditions of the contracts are as follows :—

Government aid.—For five years from 1st January 1903 Government allow this railway by way of rebate on the net earnings of the North Western railway from traffic interchanged between the two, such a sum (not exceeding the amount of such net earnings of the North Western railway) as together with the net earnings of the Jammu and Kashmir railway make up an amount equal to a dividend of 3½ per cent. per annum on the capital expenditure.

Currency of contract.—Either party can revise the contract on giving six months' notice.

Terms of working.—The North Western (State) railway work and maintain the line, and supply rolling-stock, for 55·50 per cent. of the gross earnings (which include any single item of capital expenditure classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 30 per mile of line open in each half-year). The balance of the gross earnings and the said rebate are paid to the Kashmir Durbar.

Rates and fares.—Rates and fares are those which are from time to time in force on the main line of the North Western (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Percentage on total income.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1888 . . .	29,545	...	...	...	...	...	...	...	...
1889 . . .	7,51,458	...	...	...	...	...	...	...	...
1890 . . .	12,37,071	45,667	13,770	1·11	...	...	...		
1891 . . .	13,80,083	57,312	15,904	1·15	...	...	...		
1892 . . .	9,45,302	54,005	15,444	1·63	...	...	...		
1893 . . .	9,56,327	14,382	14,382	1·50	...	...	...		
1894 . . .	9,59,773	17,556	17,556	1·83	...	...	...	Included with the North Western (State) railway.	
1895 . . .	9,60,010	18,262	18,262	1·90	...	...	...		
1896 . . .	9,60,011	31,321	31,321	3·26	...	...	...		
1897 . . .	9,65,151	35,731	21,587	2·24	...	...	...		
1898 . . .	9,62,846	48,164	21,433	2·23	...	...	...	58	55·50
1899 . . .	9,60,820	51,532	22,932	2·39	...	...	...	62	55·50
1900 . . .	9,60,492	55,215	24,571	2·56	...	...	...	67	55·50
1901 . . .	9,60,636	52,484	23,355	2·43	...	...	...	63	55·50
1902 . . .	9,62,471	51,865	23,080	2·40	...	...	...	63	55·50
1903 . . .	9,62,284	54,861	24,422	2·54	14,085	*38,507	4·00	66	55·50
1904 . . .	9,62,208	56,231	25,023	2·60	3,828	28,851	3·00	68	55·50

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$ **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*c*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Ludhiana *vid* Dhuri to Jakhal	6-10-99	10-4-01	78·66	78·66

Details of construction—

Permanent-way.—The permanent-way consists of 75lb. flat-footed steel rails, 30 feet long, laid on transverse sleepers of creosoted pine and deodar, 11 to a rail.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only the station yards and about 100 feet each side of level crossings are fenced with wire fencing.

Curves.—The sharpest curve is of 1,364 feet radius and 0·48 mile long.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Maler Kotla and Jind Durbars) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—The line was constructed at the cost of the Maler Kotla and Jind Durbars.

Currency of contract.—The contract is terminable on the 31st December 1904, or on the 1st January or 1st July in any year thereafter, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western (State) railway will give to the Maler Kotla and Jind Durbars possession of the railway, works, surveys and stores, and, on this being done, the Maler Kotla and Jind Durbars will indemnify the North Western (State) railway from all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—After deduction of 55 per cent. of the gross receipts for working expenses, the balance is paid to the Maler Kotla and Jind Durbars to be divided between them in the proportion of $\frac{1}{3}$th and $\frac{2}{3}$ths, respectively.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

Statistics of working—

	Table I.				Table II.		
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.		
1901	43,10,407	2,02,207	91,034	2·11	68	55·00	The decrease in Capital outlay in 1903 was due to credits.
1902	43,24,799	4,05,005	1,82,252	4·21	99	55·00	
1903	41,19,264	5,15,026	1,41,762	3·44	101	55·00	
1904	41,19,634	3,46,039	1,55,727	3·78	85	55·00	

10 (*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Rajpura to Patiala	7-12-83	1-11-84	15·77		1884 to 1888	16
Patiala to Bhatinda	April 1888	13-10-89	91·28		1889 to 1904	107
Total	...	...	...	107·05		

Details of construction—

Permanent-way.—The line from Rajpura to Patiala is laid with 68lb. bull-headed steel rails, 24 feet long, on deodar sleepers and from Patiala to Bhatinda with 75lb. flat-footed steel rails, 30 feet long, on creosoted-pine and deodar sleepers. There are 10 sleepers to a 24 feet rail and 11 to a 30 feet rail.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—The line is fenced with 4 strand wire fencing between Rajpura and Patiala and at station yards and 100 feet on each side of level crossings between Patiala and Bhatinda.

Curves.—The sharpest curve is of 1,146 feet radius and 0·40 mile long.

Gradients.—The ruling gradient is 1 in 500.

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)—*concld.*

Terms of contract—

The railway is owned by the Patiala state and is worked by the North Western (State) railway under the following :

Contract of—30th January 1893 (between the Secretary of State and the Patiala Durbar) for maintenance and working.

Government of India letter No. 817-R. T. of 5th October 1903, sanctioning the reduction in the percentage of gross earnings to be retained by North Western railway for working, from 55 to 52, with effect from 1st January 1904.

The general conditions of the contract are as follows :—

Government aid.—The line has been constructed at the cost of the Patiala Durbar.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract, the North Western (State) railway will give to the Patiala Durbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Durbar will indemnify the North Western (State) railway from all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—55 per cent. of the gross earnings to end of 1903 and 52 per cent. thereafter.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Prop: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1884	11,12,239	5,111	—496	...	17	109·72
1885	12,29,141	48,769	—4,255	...	59	106·09
1886	12,29,141	64,623	13,816	1·12	79	78·62
1887	12,43,250	Not available	15,425	1·24	Included with North Western railway.	
1888	22,61,990		18,640	0·82		
1889	62,33,918	1,08,480	58,403	0·93	74	55·00
1890	64,00,534	5,66,946	2,55,126	3·99	101	55·00
1891	65,81,553	7,19,859	3,23,937	4·92	128	55·00
1892	66,41,382	5,64,053	2,53,824	3·82	100	55·00
1893	67,26,941	6,84,387	3,07,956	4·58	122	55·00
1894	67,01,669	12,59,632	5,66,565	8·45	224	55·00
1895	67,02,457	13,18,002	5,93,506	8·86	235	55·00
1896	66,95,913	9,97,326	4,49,022	6·71	178	55·00
1897	66,96,451	6,96,927	3,13,617	4·68	124	55·00
1898	67,01,520	7,20,637	3,16,187	4·72	125	55·00
1899	67,05,785	6,79,520	3,05,784	4·56	122	55·00
1900	67,05,785	6,93,304	3,12,211	4·66	125	55·00
1901	67,10,823	8,60,642	3,87,289	5·77	155	55·00
1902	67,12,977	8,40,947	3,78,426	5·64	151	55·00
1903	67,18,890	9,64,002	4,33,801	6·46	173	55·00
1904	67,23,431	10,67,925	5,12,604	7·62	192	52·00

10 (*e*) Southern Punjab railway (5′ 6″ gauge)—

The railway runs from Delhi *viâ* Bhatinda to Samasata on the North Western (State) railway, shortening the distance by railway between Delhi and Karachi by 187 miles, as compared with the route *viâ* Umballa and Lahore.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—					1897	400
Delhi *viâ* Bhatinda to Samasata	...	10-11-97	401·16		1898	400
Independent entrance from Delhi Brewery to Delhi	...	20-12-02	0·79		1899	424
Branch—					1900	424
Narwana to Kaithal	...	1-2-99	23·38		1901	424
					1902	425
TOTAL OPEN MILEAGE	...	...	...	425·33	1903	425
					1904	425
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Ludhiana to MacLeodganj	10-11-03	...	154·00	154·00		
GRAND TOTAL	...	...	...	579·33		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads } (a) \text{ to } (j)}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

10 (*e*) Southern Punjab railway (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75 lb. flat-footed steel rails, mostly 30 and 36 feet long, laid on transverse sleepers of creosoted pine and deodar, 11 to a 30 feet rail and 13 to a 36 feet rail.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only the station yards are fenced with 4 wire fencing.

Curves.—The sharpest curve is of 2,100 feet radius and 0·45 mile long.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

Government aid.—Government allow the Company in respect of each half-year, by way of rebate on the net earnings of the North Western (State) railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western (State) railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the Company's net earnings, make up an amount equal to interest for the year at the rate of 3½ per cent. on the actual rupee expenditure charged in the capital account. Land was also provided free of cost to the Company.

Currency of contract.—Government may, by giving 12 months' notice, determine the contract on the 31st December 1919, or on the 31st December 1929 or 1939, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent. the total capital expenditure of the Company in sterling, nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to work and maintain the line and provide rolling-stock at 52 per cent. of the gross earnings. Surplus profits in excess of 3½ per cent. per annum on the total capital expenditure in sterling are *divisible equally at the close of each year between the Government and the Company.* The North Western (State) railway take all receipts from traffic between its own stations including Delhi and Samasata, but excluding the Patiala state railway, which passes over the Southern Punjab railway. The Company, in addition to its earnings from local and interchanged traffic, receives, where it forms part of the shortest route, its mileage proportion of traffic between the North Western railway and foreign lines.

Rates and fares.—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from N. W. (S.) ry.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1895 . .	21,49,441	...	...	...	...	...	...	...	...	Gross earnings up to 1900 include credits in accordance with the award by Mr. C. A. Cripps, K.C., but the gross earnings in 1901 exclude those credits which were actually afforded in the year 1901.
1896 . .	1,30,67,048	...	...	...	...	...	...	...	...	
1897 . .	1,99,08,812	1,61,038	77,298	0·39	19,942	97,240	0·49	27	52·00	
1898 . .	2,23,62,921	16,28,254	7,81,562	3·49	...	7,81,562	3·49	78	52·00	
1899 . .	2,26,68,262	16,11,010	7,73,285	2·94	17,218	7,90,603	3·02	73	54·00	
1900 . .	2,26,57,963	16,31,550	7,97,090	3·47	5,832	7,92,923	3·50	74	53·00	
1901 . .	2,25,70,734	24,57,481	11,79,591	5·22	...	11,79,591	5·22	111	52·00	
1902 . .	2,27,93,660	19,41,541	9,31,940	4·09	...	9,31,940	4·09	88	52·00	
1903 . .	2,28,27,906	21,59,158	10,36,396	4·54	...	10,36,396	4·54	98	52·00	
1904 . .	2,82,87,961	27,47,442	13,18,772	4·66	—4,52,668	8,66,104	3·05	124	52·00	

10 (*f*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Kushalgarh to Kohat	31-10-00	25-5-02	29·70		1902	30
Kohat to Thal	31-10-00	1-4-03	62·03		1903	92
					1904	92
Total . .	...	...	...	91·73		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM**—*contd.*

10 (*f*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lb. to the yard, laid on wooden sleepers; the Kohat-Thal section is laid partly with 25 lb. and partly with 21 lb. rails, partly on wooden and partly on steel sleepers. The rails are generally 24 feet long and there are 9 sleepers to a rail on the Khushalgarh-Kohat section and 10 wooden and 11 steel sleepers to a rail on the Kohat-Thal section.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—Of curves with a radius of less than 500 feet there are 1·2 miles distributed over the line, the radii varying from 239 to 471 feet.

Gradients.—The ruling gradient between Khushalgarh and Kohat is 1 in 83·3 and between Kohat and Thal, 1 in 100.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working—

Table I.	Table II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
Included with the North Western (State) railway	1902	19	56·44
	1903	34	174·55
	1904	34	222·38

10 (*g*) Nowshera-Durgai railway (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Nowshera to Durgai	15-5-99	1-1-01	40·25	40·25

Details of construction—

Permanent-way.—The permanent-way consists of 35 lb. flat-footed steel rails, 24 feet long, laid partly on wooden and partly on steel sleepers, 8 to a rail.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 477 feet and is 0·10 mile long.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts.—The railway is owned and worked by the State.

Statistics of working—

Table I.	Table II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
Included with the North Western (State) railway	1902	51	151·11
	1903	53	101·66
	1904	69	97·29

10 (*h*) Dandot Light railway (2′ 0″ gauge)—

The Dandot Light railway has been constructed by the North Western (State) railway to develop the Dandot collier which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consist chiefly of two inclines worked with steel wire ropes by combined gravity and steam power. On the second portion (1·2 miles) there is another incline worked by gravity alone.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (j)}}$ **NORTH WESTERN (STATE) RAILWAY SYSTEM—*concld.***

10 (*h*) Dandot Light (2′ 0″ gauge)—*concld.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Dandot station to the mouth of the main mine	...	5-7-89	1·89		1889 to 1892	2
Head of middle incline to shaft No. 10 of outcrop mine	...	1-7-93	1·29		1893	3
Head of upper incline to Pidh coal platform	...	6-6-95	3·00		1894	3
					1895 to 1904	6
TOTAL	...	...	...	6·18		

Details of construction—

Permanent-way.—The permanent-way consists of old metre gauge 36 lb. and 40 lb. rails, 20 and 24 feet long, laid on 6 and 8 deodar sleepers, respectively.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Terms of contracts.—The line is owned and worked by the State.

Statistics of Working—Included with the North Western (State) railway.

10 (*i*) Jullundur-Kapurthalla-Sultanpur (British section)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Jullundur to the British frontier	7-8-03	...	6·80	6·80

Commencement of work not authorised.

10 (*j*) Jullundur-Kapurthalla-Sultanpur (Native state section)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Sultanpur to the British frontier	7-8-03	...	22·02	22·02

Commencement of work not authorised.

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) to (c)}}$ **. OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—**

Lines comprising system.—The Oudh and Rohilkhand (State) railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Oudh and Rohilkhand (State) railway (5′ 6″ gauge)	1,158·05	64·50	1,222·55
(*b*) Hardwar-Dehra railway (5′ 6″ gauge)	32·04	...	32·04
(*c*) Cawnpore-Burhwal link (3′ 3½″ gauge)	79·60	...	79·60
Total	1,269·69	64·50	1,334·19

Running powers—

	Miles.
Home line over Foreign line :—	
Ghaziabad to Delhi, East Indian railway, granted for passenger and goods trains, but exercised for the former only	13·00
Foreign lines over Home line :—	
Great Indian Peninsula railway, at Cawnpore } granted for passenger and goods trains, but exercised for the former only	0·86
" " " " Cawnpore to Lucknow }	44·63
East Indian railway, Moghal Serai to Benares Cantonment, for certain passenger trains only	10·00
	55·49
Bengal and North-Western railway, Cawnpore to Aishbagh (Cawnpore-Burhwal link, 3′ 3½″ gauge) }	45·03
" " " " Daliganj to Burhwal (" " " " } for passenger and goods	34·57
" " " " Benares Cantonment to Benares City (Oudh and Rohilkhand } trains.	1·81
(State) railway, 3′ 3½″ gauge)	
	81·41

11 (*a*) Oudh and Rohilkhand (State) railway proper (5′ 6″ gauge)—

The Oudh and Rohilkhand railway was acquired by the State from the late guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Carew and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand (State) railway. This tramway is 3·25 miles long and is worked by manual power. It is used for goods traffic only.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) to (c)}}$ **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*contd.***

11 (*a*) Oudh and Rohilkhand (State) railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
Main line—			Miles.	Miles.		Miles.	
Moghal Sarai to Bechupur	11-5-01	31-10-02	1·41		1867	42	
Bechupur to mile 3·25	...	22-12-63	2·14		1868	42	
From mile 3·25, south of the Dufferin bridge, to Kashi (Benares Ganges) station	...	1-10-87	4·25		1869	42	
From Kashi (Benares Ganges) station to Benares Cantonment	...	15-6-83	1·50		1870	42	
Benares Cantonment to Rae Bareli	Oct. 1895	4-4-98	135·26		1871	42	
Rae Bareli to Lucknow	5-8-91	18-10-93	48·56		1872	293	
Lucknow to Sandila	...	1-2-72	30·00		1873	456	
Sandila to Hardoi	...	15-7-72	33·00		1874	540	
Hardoi to Shahjahanpur	...	1-3-73	39·00		1875	544	
Shahjahanpur to Faridpur	...	8-9-73	32·00		1876	544	
Faridpur to Bareilly	...	1-11-73	18·00		1877	544	
Bareilly to Moradabad (chord line *vid* Rampur)	4-12-91	8-6-94	56·07		1878	547	
Moradabad to Nagina	29-8-81	8-10-94	47·25		1879	547	
Nagina to Najibabad		1-4-85	13·70		1880	547	
Najibabad to Saharanpur		1-1-86	58·25		1881	547	
			518·49				
Benares-Lucknow loop—							
Benares Cantonment to Shahganj	...	5-1-74	56·03		1882	547	
Shahganj to Bilwai	...	1-5-74	7·00		1883	548	
Bilwai to Malipur	...	17-4-74	9·00		1884	595	
Malipur to Akbarpur	...	2-3-74	12·00		1885	607	
Akbarpur to Fyzabad	...	10-6-73	36·00		1886	686	
Fyzabad to Bara Banki	...	25-11-72	62·00		1887	692	
Bara Banki to Lucknow	...	1-1-72	17·00				
			199·03				
Bareilly-Moradabad loop—					1888	692	
Bareilly to Ukka	...	22-12-73	5·00		1889	692	
Ukka to Aonla	...	1-11-73	11·00		1890	692	
Aonla to Chandausi	...	10-6-73	37·00		1891	692	
Chandausi to Moradabad	...	23-10-72	27·50		1892	692	
			70·50		1893	741	
					1894	797	
Total Main and Loop lines	...	...	...	789·02	1895	797	
Branches on main line—					1896	812	On the Allahabad branch, the line between Chilbila and Partabgarh, 2·45 miles, is part of the main line.
Allahabad branch—					1897	812	
Fyzabad to Sultanpur	8-11-01	1-2-04	35·50		1898	950	
Sultanpur to Chilbila		10-4-03	22·07		1899	950	
Partabgarh to Siwait		20-3-03	24·98		1900	1,037	
Siwait to Phaphamau		20-1-04	3·27		1901	1,037	
			85·82		1902	1,039	
Cawnpore branch—					1903	1,101	
Lucknow to Cawnpore	Jany. 1864	23-4-67	42·00		1904	1,158	On the Cawnpore branch, the line on the Cawnpore bridge, 0·59 mile, is of mixed (5′ 6″ and 3′ 3½″) gauge.
Left bank Ganges to junction with the East Indian railway at Cawnpore	...	15-7-75	3·22				
Passenger approach to the East Indian railway at Cawnpore	...	21-2-88	0·23				
			45·45				
Madhoganj branch—							
Balamau to Madhoganj	15-8-02	20-12-03	14·50				
Ghaziabad branch—							
Moradabad to Gajroula	8-4-97	1-4-00	33·40				
Gajroula to Ghaziabad		25-11-00	53·37				
			86·77				
Meerut Branch—							
Hapur to Meerut	3-4-03	24-11-04	18·09				
Kotdwara branch—							
Najibabad Junction to the right bank of the Koh river opposite Kotdwara	Oct. 1895	24-12-96	15·19				
Hardwar branch—							
Lhaksar Junction to the left bank of the Ganges Canal near Jawalapur	15-5-83	1-1-86	13·53				
Left bank of the Ganges Canal near Jawalapur to Hardwar		20-8-86	3·53				
			17·06				
Branches on Benares-Lucknow loop—							
Ajodhya Ghat branch—							
Rannpali to Ajodhya Ghat	16-12-84	15-11-86	3·22				
Bahramghat branch—							
Bara Banki to Barhamghat	...	20-11-72	21·52				
Branches on the Bareilly-Moradabad loop—							
Aligarh branch—							On the Bahramghat branch the length between Bara Banki and Burhwal, 16·79 miles, is of mixed (5′ 6″ and 3′ 3½″) gauge.
Chandausi to Rajghat	...	28-10-72	30·48				
Rajghat to Aligarh	...	1-2-72	30·12				
			60·60				
Benares City branch—							
Benares Cantonment (Oudh and Rohilkhand) to Benares City (Bengal and North-Western) (3′ 3½″ *gauge*)	...	1-4-99	1·81				
Total Branches	...	...	...	370·03			
Total open mileage, Oudh and Rohilkhand (State) Railway proper, carried over	...	...	...	1,158·05			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*contd.***

11. (*a*) Oudh and Rohilkhand (State) railway proper (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Total open mileage, brought forward .	...		...	1,158·05
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION				
Allahabad branch—				
Phaphamau to Allahabad	8-11-01	1-1-05	7·00	
Zafarabad branch—				
Phaphamau to Zafarabad	2-10-03	...	57·50	
			64·50	
Total lines under construction .	...	...	...	64·50
GRAND TOTAL, OUDH AND ROHILKHAND (STATE) RAILWAY PROPER .	...	...	...	1,222·55

Details of construction.—

Permanent-way.—The permanent-way at first adopted consisted of 60 lb. flat-footed iron rails, 25 feet long, laid partly on cast-iron pots and partly on wrought-iron saddle-back sleepers. The section from Moradabad to Saharanpur was, however, laid originally with 75-lb. flat-footed steel rails O. and R. R. pattern, 25 feet long, on stamped steel bowls. Previous to 1889, the original iron rails had been replaced by 60-lb. flat-footed steel rails, 25 feet long. Since then all renewals have been made with 75-lb. flat-footed steel rails, I. S R. pattern, 30 and 36 feet long, laid on metal or wooden sleepers. The 60-lb. rails are now completely eliminated from the main line, and on the Moradabad-Saharanpur section of 190 miles, 40·31 had been relaid on December 1904.

The distribution of rails and sleepers is now as follows :—

Rails.—(All rails are flat-footed steel, except where otherwise stated). 50·37 miles of main line and 4·04 miles of the Benares-Lucknow Loop, with 75-lb. rails, 36 feet long, I. S. R. pattern ; 388·35 miles of the main line, 193·10 miles of the Benares-Lucknow Loop, the Allahabad branch, 44·60 miles of the Cawnpore branch, 0·50 mile of the Bareilly-Moradabad Loop and the Ghaziabad branch, with 75-lb. rails, 30 feet long, I. S. R. pattern ; 79·19 miles of the main line, 21·88 miles of the Bareilly-Moradabad Loop, the Meerut branch and 16·98 miles of the Hardwar branch, with 75-lb. rails, 25 feet long, O. and R. R. pattern ; 0·57 mile of the main line with 60-lb. rails, 35 feet long ; 0·39 mile of the Benares-Lucknow Loop, 2·71 miles of the Ajodhyaghat branch, 16·52 miles of the Bahramghat branch, 0·85 mile of the Cawnpore branch, 1·17 miles of the Madhoganj branch, the Aligarh branch, 47·87 miles of the Bareilly-Moradabad Loop, 9·54 miles of the Kotdwara branch, and 0·05 mile of the Hardwar branch, with 60-lb. rails, 25 feet long ; 1 50 miles of the Benares-Lucknow Loop, 0·51 mile of the Ajodhyaghat branch, 5·00 miles of the Bahramghat branch, 13·33 miles of the Madhoganj branch, 0·75 mile of the Bareilly-Moradabad Loop, 5·65 miles of the Kotdwara branch, 0·63 mile of the Hardwar branch, with 60-lb flat footed iron rails, 25 feet long.

Sleepers.—30·97 miles of main line, 2·80 miles of the Benares-Lucknow Loop, 3·22 miles of the Ajodhyaghat branch, 14·50 miles of the Madhoganj branch, 9 12 miles of the Aligarh branch, 21·75 miles of the Bareilly-Moradabad Loop, 18·01 miles of the Meerut branch, 16·63 miles of the Hardwar branch, are laid with stamped steel bowls, 7 to a 25 feet and 8 to 11 to a 30 feet rail ; 88·54 miles of the main line, 114·31 miles of the Benares-Lucknow Loop, 50·36 miles of the Aligarh branch, 13·50 miles of the Bareilly-Moradabad Loop, 2·40 miles of the Kotdwara branch, 0 07 mile of the Meerut branch, 0·01 mile of the Hardwar branch, are laid with cast iron pots mixed, 8 to 11 to a 30 feet and 13 to a 36 feet rail ; 42 04 miles of the main line and 52·44 miles of the Benares-Lucknow Loop, are laid with cast iron bowls, 11 to a 30 feet and 13 to a 36 feet rail ; 95·76 miles of the main line with steel trough transverse sleepers, 11 to a 30 feet rail, 6 miles of the Bahramghat branch, 34·50 miles of the Bareilly-Moradabad Loop, and 12·74 miles of the Kotdwara branch, with wrought-iron saddle back sleepers, 7 to a 25 feet rail ; 261 18 miles of the main line, 5·47 miles of the Benares-Lucknow Loop, the Allahabad branch, 15 52 miles of the Bahramghat branch, the Cawnpore branch, 1·12 miles of the Aligarh branch, 0·75 mile of the Bareilly-Moradabad Loop, 0 05 mile of the Kotdwara branch, 0·01 mile of the Meerut branch, the Ghaziabad branch, and 0·42 miles of the Hardwar branch, are laid with wooden sleepers, sál or deodar or jarrah, 9 to a 25 feet, 11 to a 30 feet and 13 to a 36 feet rail.

Ballast.—The line is ballasted throughout. Kunkur ballast is used on the main line from Moghalsarai to Dufferin bridge, from Chaukhandi to Sandila, and on the Allahabad, Cawnpore, Bahramghat and Hardwar branches. Stone ballast on the main line from Benares to Chaukhandi, from Bareilly to Moradabad, from Balawali to Chodiala from Babugarh to Ghaziabad on the Ghaziabad branch, and 4 miles near Pathri station on the Hardwar branch. Shingle ballast on the main line from Sandila to Bareilly, from Moradabad to Balawali, from Chodiala to Saharanpur on the Moradabad-Babugarh section of the Ghaziabad branch, and on the Kotdwara branch. The remaining portions are ballasted either with sand or earth with a covering of broken brick, kunkur or stone.

Fencing.—The line is fenced throughout with the exception of the Madhoganj, Meerut and Kotdwara branches. Wire fencing is used throughout except on the Fyzabad-Lucknow section of the Benares-Lucknow Loop, the Chandausi-Moradabad section of the Bareilly-Moradabad Loop, and on the Bahramghat branch where ditch and mound fencing is used.

Curves.—The sharpest curve on the line is of 1,000 feet radius, 1,151·50 feet long, at mile 22 on the Bahramghat branch. The sharpest curve on the Cawnpore branch is of 1,200 feet radius, 3,258·59 feet long, at mile 46. The sharpest curve on the Ajodhiaghat branch is of 1,700 feet radius, 1,511·94 feet long, between miles 3 and 4. The sharpest curves of 1,910 feet radius, 900 feet long, occur at mile 35¼, and 983 feet long, at mile 36¼ on the Allahabad branch, 4,200 feet long at mile 1 on the Madhoganj branch, 850 feet long at mile 14, and 1,000 feet long between miles 14 and 15 on the Kotdwara branch, 2,400 feet long between miles 87 and 88 on the Ghaziabad branch, and 3,006 feet long at mile 1 and

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*contd.***

11 (*a*) Oudh and Rohilkhand (State) railway proper (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

832 feet long, at mile 18 on the Meerut branch. The sharpest curves on the main line and the remaining branches have radii of 2,150 feet and more.

Gradients.—The ruling gradient of the whole of the railway is 1 in 400.

Terms of contract—

The Oudh and Rohilkhand (State) railway is owned and worked by the State.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Surplus profits paid to Company.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1867	...	...	...	...	...	...	...	74	106·97
1868	...	...	...	...	...	...	...	120	64·54
1869	...	...	...	...	...	...	...	97	81·74
1870	...	...	...	...	...	...	...	112	227·93
1871	...	...	...	...	...	...	...	117	69·31
1872	...	...	...	...	...	...	...	56	68·58
1873	...	...	...	...	...	...	...	56	72·91
1874	...	...	...	...	...	...	...	72	64·41
1875	...	...	...	...	...	...	...	97	59·71
1876	...	...	...	...	...	...	...	120	63·98
1877	...	...	...	...	...	...	...	153	52·38
1878	...	...	...	...	...	...	...	163	54·23
1879	5,80,35,784	43,44,843	18,19,936	3·14	28,00,000	...	−9,80,064	153	58·11
1880	6,02,24,081	44,55,150	19,04,409	3·16	28,19,946	...	−9,15,537	157	57·25
1881	6,25,30,985	49,28,730	19,77,699	3·16	29,14,137	...	−9,36,438	173	59·91
1882	6,52,79,840	52,62,844	18,01,871	2·76	30,67,622	...	−12,66,251	185	65·77
1883	7,07,69,446	54,56,255	24,80,362	3·50	31,35,495	...	−6,55,133	192	54·54
1884	7,91,43,383	52,75,198	23,26,146	2·94	41,14,587	...	−17,88,441	182	55·99
1885	8,54,34,426	55,37,369	17,95,361	2·10	46,53,333	...	−28,57,972	176	65·50
1886	8,95,12,775	65,05,408	28,60,755	3·20	51,88,014	...	−23,27,259	180	56·02
1887	9,17,06,668	66,46,213	31,85,249	3·42	53,98,339	...	−22,63,090	186	52·83
1888	9,18,41,649	70,77,053	30,16,005	3·28	51,67,494	...	−21,51,489	197	57·38
1889	9,22,32,226	75,39,633	42,04,076	4·56	49,71,898	...	−7,67,822	209	44·24
1890	9,27,89,260	73,81,396	37,54,478	4·05	44,23,109	...	−6,68,631	205	49·14
1891	9,28,38,358	85,64,209	49,42,458	5·32	47,25,666	...	+2,16,792	238	42·29
1892	10,31,95,085	85,42,836	50,16,329	4·84	52,79,411	...	−2,63,082	237	41·28
1893	10,09,17,292	87,15,926	50,17,053	4·97	55,01,058	...	−4,84,005	239	42·44
1894	10,28,87,184	1,05,18,836	57,36,138	5·58	63,11,123	...	−5,74,985	262	45·47
1895	10,55,05,148	1,02,94,880	52,55,948	4·93	63,69,949	...	−11,14,001	248	48·95
1896	10,92,69,485	36,97,076	43,50,907	3·98	61,30,729	...	−17,79,822	209	49·97
1897	11,44,19,239	85,15,856	36,96,778	3·23	59,77,486	...	−22,80,708	186	56·59
1898	11,61,90,213	98,51,590	53,07,727	4·56	58,76,247	...	−5,68,520	190	46·12
1899	12,21,84,423	1,11,38,990	60,76,595	4·97	59,75,292	...	+1,01,303	208	45·45
1900	12,53,94,869	1,15,15,182	55,91,727	4·45	62,82,185	...	−6,86,458	208	51·44
1901	12,88,66,845	1,32,54,291	72,20,007	5·60	63,12,044	...	+9,07,963	231	45·53
1902	13,63,17,057	1,31,65,792	64,11,236	4·70	64,75,905	...	−64,569	230	51·30
1903	14,52,62,379	1,39,49,923	72,31,562	4·98	68,00,305	...	+4,31,557	226	48·16
1904	11,96,68,929	1 52 96,206	71,33,117	4·76	70.55,640	...	+77,477	235	53·37

11 (*b*) Hardwar-Dehra railway (5′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Hardwar to Dehra	18-11-96	1-3-00	32·04	32·04

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed I. S. R. steel rails 20 feet long on deodar sleepers 11 to a rail.

Ballast.—The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 75.

Terms of contracts—

The Hardwar-Dehra railway is worked under the following contract :—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract.—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital and except for *bonâ fide* temporary purposes, at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract.—Government may determine the contract, on twelve months' notice either on the 31st December 1919 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM**—*contd.*

11 (*b*) Hardwar-Dehra railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

Power of Company to surrender contract.—Nil.

Terms of working.—After deduction of 50 per cent. of the gross earnings for working expenses, (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Rates and fares.—Rates and fares to be arranged between Government and the working agency within one-and-half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1897	1,96,617	...	...	...	...	...	...	...	...	Interest up to 1900 was charged to capital and net earnings of 1900 were credited to capital in reduction of interest charges.
1898	10,70,345	...	...	...	...	...	...	...	...	
1899	23,42,687	...	...	...	...	...	...	...	...	
1900	25,67,093	1,60,485	80,243	3·13	...	...	...	115	50·00	
1901	28 12,301	2,13,456	1,06,728	3·80	84,220	...	+22,508	128	50 00	
1902	28,36,486	2,52.495	1,26,242	4·45	85,048	11,253	+29,941	152	50·00	
1903	28,44,542	2,62,719	1,31,359	4·62	85,260	20,597	+25,502	158	50·00	
1904	29,12.992	2,63,612	1,31,806	4·52	86,777	23,050	+21,979	158	50·00	

11 (*c*) Cawnpore-Burhwal (3′ 3⅜″ gauge) link—

The construction of the Cawnpore-Burhwal (3′ 3⅜″ gauge) link was sanctioned as a part of the project for linking up the 3′ 3⅜″ gauge systems of Northern India. The mileage shown excludes 5·66 miles of the existing line of the Lucknow-Bareilly railway between Daliganj and Aishbagh, which forms a part of the alignment of this line. Starting from the north of Burhwal station, on the Oudh and Rohilkhand (State) railway, it runs up to Bara Banki along a third rail laid inside the Oudh and Rohilkhand (State) railway line, and thence on to Malhaur a separate 3′ 3⅜″ track has been laid parallel to, and 14 feet distant from, the Oudh and Rohilkhand (State) railway track. From Malhaur it deviates to the east, over new country, and joins the Lucknow-Bareilly railway at the north end of Daliganj station. Passing through Daliganj, the Lucknow-Bareilly railway is utilized to Aishbagh, where it crosses that railway and runs for 2·08 miles over new country; it joins the Cawnpore branch of the Oudh and Rohilkhand (State) railway at mile 2·80 from Lucknow, then runs parallel to the latter line up to the Cawnpore bridge station, from which point a third rail has been laid across the Ganges bridge. After clearing the bridge, the separate track, parallel to the Oudh and Rohilkhand (State) railway is resumed and followed up to and through the Cawnpore [Oudh and Rohilkhand (State) railway] station yard, and, passing on, crosses the Grand Trunk Road, Ganges canal, and East Indian railway goods siding on a grade crossing, and joins the Cawnpore-Achnera railway at mile 83·26.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.	Remarks.
			Miles.	Miles.		Miles.	
Burhwal to Daliganj	Oct. 1894	24-11-96	34·57		1896	35	The following lengths of this line are on the mixed (5′ 6″ and 3′ 3⅜″) gauge:—Burhwal to Bara Banki, 16·79 miles; on the Cawnpore bridge, 0·59 mile.
Aishbagh to Cawnpore		25-4-97	45·03		1897 to 1904	80	
Total	...	...	...	79·60			

Details of construction—

Permanent-way.—Where the line is not mixed gauge, it is laid with new 50-lb. steel rails.

Ballast.—The line is ballasted throughout either with sand or earth with a covering of broken brick or kunkur, or with kunkur, stone, or shingle.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The line is owned by the State and the Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link, and pay to the Oudh and Rohilkhand railway 80 per cent. of the gross receipts arising therefrom.

Statistics of working—

Included with the Oudh and Rohilkhand (State) railway (5′ 6″ gauge).

APPENDIX 38.

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads } (a) \text{ and } (b)}$. **ASSAM-BENGAL RAILWAY SYSTEM—**

Lines comprising system.—The Assam-Bengal railway system is made up of—

	Open line. Miles.
(*a*) Assam-Bengal railway (3′ 3¾″ gauge)	740·38
(*b*) Noakhali (Bengal) railway (3′ 3¾″ gauge)	34·90
Total	775·28

As it was considered that railway communication with Bengal and Assam was a matter of urgency, the construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was subsequently formed in England in April 1892 and took over the works commenced by the State.

12 (*a*) Assam-Bengal railway proper (3′ 3¾″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
Main line—			Miles.	Miles.		Miles.	
Chittagong Port to Chittagong		3-11-95	1·73		1895	130	Akhaura to Badarpur closed for repairs after the earthquake of 12th June 1897 and reopened as follows: Akhaura to Srimangal . 20-7-97; Srimangal to Kalaura . 24-7-97; Kalaura to Karimganj . 8-8-97; Karimganj to Badarpur . 18-10-97
Chittagong to Feni		1-7-95	56·90		1896	286	
					1897	361	
					1898	379	
Feni to Comilla		1-7-95	39·10				
Comilla to Akhaura	28-5-91	1-1-96	29·41				Badarpur to Lumding closed on 16th April 1904 for damages caused by unusual rainfall and re-opened as follows: Badarpur to Jatinga on 21st April 1904; Lumding to Moibong on 24th April 1904. Hill section through for goods traffic on 1st June 1904 and for passenger on 1st November 1904.
Akhaura to Karimganj		4-12-96	115·00		1899	432	
Karimganj to Badarpur		4-12-96	12·00		1900	436	
Badarpur to Damchara		23-4-99	18·53				
Damchara to Lumding		1-12-03	96·70		1901	589	
Lumding to Nazira		1-1-01	141·87		1902	589	
Nazira to Lakwa		15-11-01	10·71		1903	740	
Lakwa to Bhojo		1-2-03	12·72		1904	740	
Bhojo to Tinsukia		1-3-03	41·94				
				576·01			
Total Main line	...	...	...				
Branches—							
Chandpur branch—							
Laksam to Chandpur		1-7-95	31·62				
Silchar branch—							
Badarpur to Katta Khal		13-6-98	6·27				Gauhati to Jamuna Mukh closed for repairs after the earthquake of 12th June 1897 and reopened on 2nd January 1899. Owing to the bad state of the road due to excessive rains the length between Jamuna Mukh and Lumding (temporary station) was closed for public traffic from 2nd October 1899 and re-opened on 1st January 1900.
Katta Khal to Silchar		8-11-98	12·35				
			18·62				
Gauhati branch—							
Gauhati to Gauhati Ghat	28-5-91	1-1-97	1·32				
Gauhati to Jamuna Mukh		1-1-97	74·11				
Jamuna Mukh to Lanka		2-1-99	19·11				
Lanka to Lumding (temporary station)		1-3-99	15·55				
Lumding (temporary station) to Lumding		20-2-00	3·44				
			113·53				
Total Branches	...	...	...	163·77			
TOTAL	...	...	...	740·38			

Details of construction—

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails, 30 feet long, with a small percentage of 27 and 24 feet rails, partly on sal and pyinkado and partly on bastard sal, nageshur and jarrah wood sleepers, 11 to a 30 feet rail.

Ballast.—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted. South of Lumding most of the work is complete, broken stone, shingle with some broken brick and laterite being used; whilst north of Lumding both on the main line to Tinsukia and on the Gauhati branch, only a small proportion of the line has at present been ballasted.

Fencing.—The line is fenced with State railway standard pattern fencing between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghat and Gauhati and half a mile from Gauhati towards Lumding and at some stations on the hill section.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) and (b)}}$. **ASSAM-BENGAL RAILWAY SYSTEM**—*contd.*

12 (*a*) Assam-Bengal railway proper (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Curves.—The sharpest curve is of 382 feet radius on the hill section.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding 1 in 60 with a 1 in 37 banking section, 8·54 miles long; between Gauhati and Tinsukia, 1 in 100; between Laksam and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150.

Terms of contract—

The Assam-Bengal railway is worked under the following contract:—

Contract of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

The general conditions of the contract are as follows:—

Government aid.—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. Up to 30th June 1898, interest was allowed at 3½ per cent. Land was provided free of charge.

Terms of contract.—The contract provides that the Company raises £1,500,000, and that any further money required be supplied either by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of moneys paid against interest on the Company's share capital and sums applied from net earnings), are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

Currency of contract.—Government may determine the contract, by giving the Company in England 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line is worked at a loss for not less than three half-years consecutively. On the determination of the contract, the Company is to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

(1) Contribution due to the Provident Fund, calculated at one per cent. of net earnings.

(2) The equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than $\frac{3}{11}$ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital.

(3) The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceeds $\frac{8}{11}$ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

	TABLE I.						TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1891	1,53,203	...	...	...	5,893	—5,893	...	...
1892	30,16,133	...	...	...	2,66,378	—2,66,378	...	...
1893	1,07,63,192	...	...	...	7,09,987	—7,09,987	...	...
1894	2,46,89,898	...	...	...	8,76,954	—8,76,954	...	...
1895	4,04,38,298	2,14,426	—8,047	...	13,95,636	—14,03,683	64	183·75
1896	5,21,39,304	6,18,785	33,238	0·06	23,73,034	—23,39,796	71	94·63
1897	6 37,67,401	9,90,640	72,214	0·11	22,56,279	—21,84,065	63	92·71
1898	7,56,41,721	13,08,124	54,551	0·07	24,45,275	—23,90,724	86	95·83
1899	8,69,56,236	16,19,646	3,22,704	0·37	28,63,084	—25,40,380	75	80·08
1900	9,56,01,772	17,09,955	3,64,364	0·38	33,31,390	—29,67,026	75	78·69
1901	10,41,49,467	21,34,252	4,56,654	0·44	35,06,252	—30,49,598	70	78·60
1902	11,11,34,922	20,96,058	2,54,418	0·23	38,08,387	—35,53,969	68	87·86
1903	12,40,28,548	23,97,658	4,43,963	0·36	40,71,450	—36,27,487	72	80·51
1904	12,60,09,639	29,53,962	1,05,390	0·08	41,66,535	—40,61,145	77	94·78

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) and (b)}}$. **ASSAM-BENGAL RAILWAY SYSTEM**—*concld.*

12 (*b*) Noakhali (Bengal) railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Laksam to Noakhali	6-4-01	15-5-03	30·46	
Noakhali to Saheb Ghatta		10-11-03	4·44	
TOTAL	...	...	...	34·90

Details of construction—

Permanent-way.—The line is laid with 41¼ lb. steel rails on sal sleepers. A few jarrah wood sleepers have also been used.

Ballast.—The line is not ballasted.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The Noakhali (Bengal) railway is worked under the following contracts:—

Contract of—27th March 1901 [between the Secretary of State and the Noakhali (Bengal) Railway Company] for construction of the line.

27th March 1901 [between the Assam-Bengal Railway Company, and the Noakhali (Bengal) Railway Company] for working the line.

The general conditions of the contracts are as follows:—

Government aid.—If the net earnings in any half-year are less than Rs. 30,000, Government allow as rebate a sum not exceeding one-half of the gross earnings of such half-year of the Assam-Bengal railway from interchanged traffic (except stores) as will, together with the net earnings of the Company, make up an amount equal to Rs. 30,000. Land has been provided free of charge.

Terms of contract.—The Company's share or stock capital is limited to £130,000, which cannot be increased without the sanction of the Secretary of State and of the working agency; but the Company can raise money at a reasonable rate of interest for *bond fide* temporary purposes.

Currency of contract.—The Secretary of State may, by giving notice and by paying to the Company in India the value of the railway, works, plant, machinery and stores, determine the contract, if the Company fails to comply with its obligations under the contract. The Secretary of State may, by giving twelve months' notice determine the contract, either on the 31st December 1922 or on the 31st December in the last year of any subsequent period of ten years, on paying to the Company in India, within four calendar months from the time at which the contract should be determined, a sum equal to twenty-five times the average yearly net earnings during the three years immediately preceding provided that the amount so payable shall not exceed by more than 20 per cent. the balance on the Capital Account of the Company, or be less than such balance.

Terms of working.—The gross earnings are to be applied in payment—

(1) To the credit of the Provident Institution of the Assam-Bengal railway of a sum equal to one-half of 1 per cent. of the total gross earnings;

(2) Of Rs. 25 per mile open per week of the new railway maintainable by the Company; and of Rs. 35 per mile open per week of the new railway not maintainable by the Company, which includes any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; and

(3) Of all moneys paid or payable to the Secretary of State for the supervision of such mileage during such half-year; the residue to be paid over to the Company as the net earnings of the railway.

Rates and fares.—The rates and fares to be fixed from time to time by the Secretary of State after consultation with the working agency, within the maxima and minima for the time being in force on the Assam-Bengal railway.

Statistics of working—

	Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from Assam-Bengal railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	21,04,827	30,099	2,409	0·11	23,389	25,798	1·23	30	92·00
1904	21,59,851	55,840	−3,232	...	50,775	47,543	2·20	31	105·79

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) \& (b)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM.**

Lines comprising system.—The Bengal and North-Western railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(a) Bengal and North-Western railway (3′ 3¾″ gauge)	870·80	147·94	1,018·74
(b) Tirhoot (State) railway (3′ 3¾″ gauge)	534·98	238·35	773·33
Total	1,405·78	386·29	1,792·07

Running powers—

Home line over Foreign lines—

	Miles.	
Cawnpore to Aishbagh, Cawnpore-Burhwal (3′ 3¾″ gauge) link, Oudh and Rohilkhand (State) railway	45·93	for passenger and goods trains.
Aishbagh to Daliganj, Lucknow-Bareilly railway	3·40	
Daliganj to Burhwal, Cawnpore-Burhwal (3′ 3¾″ gauge) link, Oudh and Rohilkhand (State) railway	34·57	
Benares Cantonment to Benares City, Oudh and Rohilkhand (State) railway	1·31	
	84·81	

The Bengal and North-Western railway has direct communication with the railway system of India at only five points on its system, *viz.*, at Burhwal, Benares, Jaunpur, Shahganj and Katihar. At all other points, communication is interrupted by rivers. Communication across the Ganges is maintained with the East Indian railway at the following ferries: between Ghazipur and Tarighat (ordinary steam ferry); between Paleza Ghat and Digha Ghat (ordinary steam ferry); between Semaria Ghat and Mokameh Ghat (wagon ferry); and between Barari Ghat and Bhagalpur Ghat (wagon ferry). Eventually a branch between Bhagalpur Ghat and the East Indian railway at Bhagalpur will connect the Bengal and North-Western and East Indian railways *viâ* the Bhagalpur ferry. Between Khanwa Ghat on the Kosi extension of the Tirhoot (State) railway and Anchara Ghat on the Kosi branch of the Eastern Bengal (State) railway, the country boat ferry worked by the Eastern Bengal (State) railway has been discontinued. There is a bridge of boats between Ajodhya and Ajodhya Ghat during the dry weather months, but during the rains this bridge is removed and traffic is worked by a steam ferry. The Tirhoot (State) railway was worked by State agency until 1890, when it was leased to the Bengal and North-Western Railway Company.

13 (*a*) Bengal and North-Western railway proper (3′ 3¾″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Sonepur to Mankapur	18-5-82	15-1-85	218·50		1884	75
Mankapur to Nawabganj		2-4-84	14·00			
Nawabganj to Ajodhya		1-12-84	6·10			
			238·60		1885	303
					1886	376
Loop line—					1887	376
Sonepur to Bunwarchak	18-5-82	15-1-85	9·34			
					1888	376
Total Main and Loop lines	...	...	...	247·94		
Branches—					1889	376
Uska Bazar branch—						
Gorakhpur to Uska Bazar	3-8-85	15-12-86	39·58		1890	376
Naipalganj Road branch—					1891	401
Mankapur to Bahraich	18-5-82	2-4-84	55·00			
Bahraich to Naipalganj Road		15-12-86	33·98		1892	414
			88·98		1893	414
Revelganj branch—						
Chupra to Revelganj	Nov. 1889	15-4-91	7·34		1894	414
Revelganj to Manjhi Ghát	...	1-4-99	3·71			
			11·05		1895	414
Bahramghat branch—					1896	479
Gonda to Colonelganj	Nov. 1889	29-10-91	17·75			
Colonelganj to Jarwal Road		1-2-92	10·30		1897	485
			28·05		1898	596
Burhwal branch—						
Jarwal Road to the west bank of the Gogra river	10-1-95	18-12-96	2·63		1899	743
Gograghat to Ganeshpur		24-12-98	3·27			
Chowka Ghat to Burhwal		24-11-96	4·12		1900	743
			10·02		1901	743
Tulsipur branch—						
Gonda to Balrampur	10-1-95	15-12-96	22·00		1902	748
Balrampur to Tulsipur		1-6-98	19·00			
			41·00		1903	813
Katarnian Ghát branch—					1904	871
Nanpara to Mohinpurwa	10-1-95	15-12-96	15·00			
Mohinpurwa to Katarnian ghát		25-3-98	27·08			
			42·08			
Carried over	...	...	260·76	247·94		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) \& (b)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM**—*contd.*

13 (*a*) Bengal and North-Western railway proper (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward	...	...	260·76	247·94
Turtipur branch—				
Bhatni to Turtipur	10-1-95	15-12-96	17·14	
Salimpur to Barhaj		1-12-97	12·77	
			29·91	
Ganges-Gogra Doab lines—				
Turtipur to Mau	...	8-6-98	28·19	
Mau to Benares	...	15-3-99	58·06	
Mau to Azamgarh	...	8-6-98	27·15	
Azamgarh to Shahganj	15-4-01	14-2-03	34·62	
Chand-Deara Ghat to Phephna	...	12-5-99	29·00	
Phephna to Kopaganj Road	...	15-3-99	37·61	
Kopaganj Road to Dhorighat	28-4-03	29-3-04	21·70	
Phephna to Ghazipur Ghat	29-12-01	11-3-03	51·16	
Ghazipur Ghat to Aunrihar	...	15-3-99	28·27	
Aunrihar to Jaunpur	1-11-02	25-3-04	36·14	
			332·19	
Total Branches	...	...	...	622·86
TOTAL OPEN MILEAGE, BENGAL AND NORTH-WESTERN RAILWAY PROPER	...	...	...	870·80
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Ganges-Gogra Doab lines—				
Uska Bazar to Barhni (Bahadurganj)	31-3-03	5-1-05	31·00	
Barhni (Bahadurganj) to Tulsipur		...	22·54	
Gaisauri to Jarwa		...	12·56	
Gorakhpur to Bagaha		...	60·94	
			127·04	
Daronda-Maharajganj branch—				
Daronda to Maharajganj	28-9-04	...	3·90	
Sayan-Gopalganj branch—				
Sayan to Thawe	2-11-04	...	17·00	
Total Lines under construction	...	...	...	147·94
GRAND TOTAL, BENGAL AND NORTH-WESTERN RAILWAY	...	...	...	1,018·74

Details of construction—

Permanent-way.—The main line between Sonepur and Burhwal is laid with 50 lb. steel rails on sal sleepers. The rest of the line north of the Gogra is laid with 41¼ lb. steel rails mostly on sal sleepers. The Ganges-Gogra Doab lines, with the exception of the Aunrihar-Phephna branch, which is laid with 50 lb. steel rails, is laid with 41¼ lb. steel rails on sal sleepers. The rails in different places are 24, 30 and 40 feet long and on 9, 11 and 15 sleepers, respectively.

Ballast.—The whole line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing.—The line was originally unfenced except in front of villages and at level crossings and near stations, but now the main line has been fenced with stone posts and 4 wires.

Curves.—The sharpest curve is of 900 feet radius, 2,000 feet long, at Paleza Ghat on the loop line.

Gradients.—The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper and these vary from time to time during the year according to circumstances.

Terms of contracts—

The Bengal and North-Western and Tirhoot (State) railways are worked under the following contracts:—

Contracts of—12th December 1882.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886.—Contract modifying that of 1882.

18th July 1890.—Contract for the taking over and working of the Tirhoot (State) railway.

19th December 1894.—Contract supplemental to those of 1882, 1886 and 1890, providing for the Revelganj, Bahramghat, Burhwal, Tulsipur, Katarnian Ghat and Turtipur branches of the Company's railway and for the exercise of running powers over the Cawnpore-Burhwal (3′ 3⅜″ gauge) link.

12th December 1895.—Contract modifying that of 1890.

23rd July 1896.—Contract supplemental to those of 1882, 1886, 1890, 1894 and 1895, providing for the Ganges-Gogra Doab lines of the Company's railway, known as the Ganges Gogra Doab contract.

15th January 1903.—Supplemental contract for the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur lines.

24th April 1903—Supplemental contract regarding rate of exchange.

The general conditions of the contracts are as follows:—

Government aid.—Land alone was provided free of charge.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) \& (b)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.***

13 (*a*) Bengal and North-Western railway proper (5′ 3½″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of contracts.—(1) *Bengal and North-Western railway contract.*—The contracts of 1882, 1886 and 1894, *viz.*, those for the working of the Bengal and North-Western railway proper terminate by effluxion of time on the 31st December 1931, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, moveable machinery, stores, etc. Government may, however, determine the contract on the 31st December 1912 or on the 31st December 1932 on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government *would have been* entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, on six months' notice if the Company fails to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of line and fixed machinery and plant, less value of latter treated as a reversionary sum absolutely payable on the 31st December 1931.

(2) *Ganges-Gogra Doab contract.*—The contract of 1896, *viz.*, that covering the Ganges-Gogra Doab lines runs concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903, but in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line as shown in sterling appearing in the capital account.

(3) *Tirhoot (State) railway contract.*—The contract of 1890, *viz.*, that for working the Tirhoot (State) railway, terminated on the 31st December 1904, and a revised contract under which the railway will continue to be worked by the Company is under preparation.

Power of Company to surrender contracts.—Nil.

Terms of working.—Under the old contract the Company's railway and the Tirhoot (State) railway are worked as one concern, a joint account of working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of the open system in each half-year, and payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) and net earnings being kept, the latter being applied in the order stated—

In payment of any further contribution (beyond that chargeable to working expenses) to the Company's Provident Institution;

In payment of interest at 4 per cent. on the capital raised and expended by the Company on works chargeable to capital on the Company's railway.

In payment of interest at 4 per cent. on the capital supplied by Government; and

In payment of the residue to Government and the Company in the ratio of their respective shares of capital, subject to the further payment to the Company of 5 per cent. of the Government's share of the residue for working the Tirhoot (State) railway for Government.

Rates and fares.—On the Company's section, the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section, certain maxima and minima have been fixed within which the Company are permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Payments received for working the Tirhoot (State) Railway.	Total income.	Percentage on capital outlay.	Table II. Including the Tirhoot (State) railway from 1890. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884	1,52,47,428	77,070	Information not available.	Information not available.	—26,221	...	29	133·76
1885	2,01,86,980	12,05,320			6,10,799	3·03	72	49·52
1886	2,36,16,102	18,51,074			8,09,189	3·43	106	56·36
1887	2,56,22,684	19,44,002			8,37,004	3·27	90	56·94
1888	2,61,51,593	23,09,553			9,38,844	3·78	103	55·25
1889	2,63,41,672	22,11,824			10,53,964	4·00	103	52·35
1890	2,57,94,904	22,18,615			12,32,397	4·86	121	44·08
1891	2,76,68,842	24,76,909	15,54,599	69,484	16,20,993	5·67	131	40·04
1892	2,83,88,321	29,39,077	16,84,194	67,060	17,01,254	5·99	120	41·12
1893	2,84,84,234	26,14,546	15,81,360	66,842	16,48,702	5·79	123	43·20
1894	2,87,24,887	26,17,242	16,95,265	73,358	17,67,623	6·15	130	41·79
1895	3,12,95,704	25,71,096	16,82,766	72,909	17,55,675	5·61	133	43·45
1896	3,43,36,114	26,26,033	16,70,172	71,614	17,41,786	5·07	134	43·97
1897	4,10,32,207	27,55,718	17,24,277	74,905	17,99,182	4·38	138	45·78
1898	4,66,78,822	33,31,890	19,74,920	75 885	20,50,805	4·39	129	43·37
1899	5,16,06,763	43,44,961	26,70,911	61,940	27,32,851	5·30	131	46·67
1900	5,24,73,019	41,56,593	24,79,433	49,563	25,28,996	4 82	126	49·56
1901	5,50,91,580	53,66,794	30,97,372	76,853	31,74,225	5·76	140	44·51
1902	5,84,82,535	55,00,238	29,72,183	76,671	30,40,854	5·21	154	46·32
1903	6,21,09,547	61,96,433	38,53,972	1,04,869	39,58,341	6 47	161	40·04
1904	6,45,92,183	67,16,933	43,26,496	1,16,884	44,45,330	6·90	168	39·68

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) \& (b)}}$ **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.***

13 (*b*) Tirhoot (State) railway—(3′ 3¾″ gauge)—

The Sagauli-Raxaul branch was constructed originally by private enterprise without a guarantee or financial assistance of any kind except the free grant of land, and was worked by the Bengal and North-Western Railway Company. It was purchased by the State on the 11th April 1904 and from that date has been incorporated in the Tirhoot (State) railway for the purposes of the contract of 1890 between the Secretary of State for India and the Bengal and North-Western Railway Company.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Semaria Ghat to Dalsinghsarai	3-2-82	1-5-83	22·55		1875	38
Dalsinghsarai to Samastipur	Feb. 1874	1-11-75	14·75			
Samastipur to Muzufferpur	6-1-76	24-2-77	29·79		1876	38
Muzufferpur to Motiharee	8-7-80	1-2-83	49·57			
Motiharee to Bettiah		20-12-83	27·00		1877	68
Samastipur to Durbhanga	Feb. 1874	1-11-75	23·00			
Durbhanga to Jhanjharpur	8-7-80	1-2-83	24·00		1878	68
Jhanjharpur to Ghoghardiha	19-10-83	8-4-86	13·00			
Ghoghardiha to Nirmala	16-2-85	8-4-86	6·92		1879	85
Nirmala to Bhaptiahi		15-11-87	10·00			
Bhaptiahi to Pratapganj		1-10-88	14·00		1880	85
Pratapganj to Khandwa Ghat	...	14-11-90	8·00			
Total Main line	...	...	...	242·58	1881	85
Branches—					1882	85
Sagauli-Raxaul branch—						
Sagauli to Raxaul	...	1-3-99	18·09			
Bairagnia branch—						
Durbhanga to Sitamarhi	...	1-7-90	42·00		1883	193
Sitamarhi to Riga	...	1-1-91	6·00			
Riga to Dheng	...	1-7-91	9·00		1884	226
Dheng to Bairagnia (*fair weather line*)	23-10-91	1-3-92	3·51			
			60·51		1885	236
Sonepore branch—						
Muzufferpur to Hajipur	6-2-83	26-10-84	31·25		1886	246
Hajipur to Sonepore	19-10-83	1-8-87	3·36			
			34·61		1887	259
Hajipur branch—					1888	275
Hajipur to Hajipur Ghát	...	26-10-84	1·89		1889	273
Hajipur branch loop line	...	2-11-00	3·31			
			5·20		1890	323
Hajipur-Katihar extension—					1891	337
Hajipur to Baghwara	...	1-4-00	44·46		1892	342
Barauni Junction to Thana Bihpur	...	1-3-00	66·17			
Thana Bihpur to Katarsah	...	7-3-01	17·50		1893	342
Katarsah to Kursela (Kosi bridge and approaches)	...	10-7-02	3·75		1894	342
Kursela to Katihar	...	7-3-01	23·75			
Bhagalpur branch—			155·63		1895	342
Thana Bihpur to Barari Ghat	...	16-12-01	11·36		1896	342
Monghyr branch—					1897	342
Sahebpore Kamal to Monghyr Ghat	...	7-3-00	7·00		1898	342
Total Branches	...	...	...	292·40	1899	342
					1900	363
TOTAL OPEN MILEAGE, TIRHOOT (STATE) RAILWAY	...	...	...	534·98	1901	519
					1902	517
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					1903	517
					1904	535
Sakri to Jainagar	1-6-99	14-1-05	30·47			
Bettiah to Bagaha		...	49·35			
Bairagnia to Shikarpur		...	21·50			
Shikarpur to Biknathoree	23-9-03	...	58·05			
Mansi to Baptiahi		...	60·37			
Sihursa to Murliganj		...	18·61			
Total Lines under construction, Tirhoot (State) railway	...	...	...	238·35		
GRAND TOTAL, TIRHOOT (STATE) RAILWAY	...	...	...	773·33		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) \& (b)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM**—*concld.*

13 (*b*) Tirhoot (State) railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The sections between Sonepore and Muzaffarpur and Muzaffarpur and Baraunni, which were laid originally with 41½ lb. steel rails, have been relaid with 50 lb. steel rails on sal sleepers. The section between Samastipur and Durbhanga which was laid originally with 41½ lb. steel rails has also been relaid partly with 50 lb. steel rails. There are still about 15 miles of 41½ lb. rails on this section. The remainder of the *line* is laid partly with 41½ lb. steel rails and partly with 50 lb. iron rails, the latter being entirely on the Bairagnia branch. The 50 lb. iron rails are laid partly on sal and party on pyinkado sleepers, and the remainder partly on sal and pyinkado and partly on Denham-Olpherts' iron sleepers. The Hajipur-Katihar extension is laid with 50 lb. steel rails on sal and pyinkado sleepers. The rails at different places are 24, 30 and 40 feet long and are laid on 9, 11 and 15 sleepers, respectively.

Ballast.—The line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing.—The main line is fenced with stone posts and 4 wires.

Gradients.—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3·42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper and vary from time to time during the year according to circumstances.

Terms of contracts—See under Bengal and North-Western railway proper, pages 184 and 185.

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1875	...	...	Information not available.	Information not available	...	...	...	...	39	107·62	
1876	...	...			...	...	...	...	71	68·67	
1877	...	...			...	...	...	...	77	69·85	
1878	...	...			...	...	...	...	106	75·34	
1879	53,38,320	4,58,733			1,07,819	2·02	2,37,411	−1,29,592	113	76·49	
1880	56,18,274	5,51,068			2,33,662	4·16	2,50,659	−16,997	102	56·40	
1881	72,02,917	5,84,255			2,36,200	3·28	2,67,245	−31,045	110	59·57	
1882	1,07,92,878	6,60,922			2,54,047	2·36	3,86,612	−1,32,565	136	61·50	
1883	1,32,83,028	8,92,411			2,59,705	1·96	4,99,014	−2,39,309	103	70·90	
1884	1,48,64,982	11,90,072			2,66,583	1·79	5,74,369	−3,07,787	105	77·60	
1885	1,44,47,916	12,78,634			3,59,269	2·49	5,86,195	−2,26,926	98	71·90	
1886	1,54,73,549	14,98,638			5,01,189	3·25	6,30,944	−1,29,755	109	66·56	
1887	1,97,49,195	17,22,955			6,95,725	3·52	7,79,201	−84,476	122	59·62	
1888	2,07,78,293	18,07,283			7,98,875	3·85	8,17,485	−18,610	123	55·89	
1889	2,12,28,094	18,96,674			9,78,246	4·61	8,41,932	+1,36,314	122	48·42	
1890	2,29,94,165	23,92,977			13,21,797	5·75	9,41,207	+3,80,590	Included with Bengal and North-Western railway.		
1891	2,34,99,148	24,89,279	14,23,332	69,484	13,53,248	5·76	9,34,385	+4,19,463	...	...	
1892	2,43,25,804	21,74,862	13,82,875	67,060	13,15,815	5·41	9,50,025	+3,65,790	...	...	
1893	2,49,08,833	26,81,190	14,09,975	66,842	13,43,133	5·39	10,01,205	+3,41,928	...	...	
1894	2,50,08,061	29,42,305	15,75,581	72,358	14,63,223	5·85	9,98,388	+4,64,835	...	...	
1895	2,56,02,092	30,89,644	15,61,276	72,909	14,88,367	5·81	10,18,013	+4,70,354	...	...	
1896	2,60,38,655	31,61,172	15,56,944	71,614	14,85,330	5·70	10,27,821	+4,57,509	...	...	
1897	3,11,00,098	32,38,109	16,29,812	74,905	15,51,907	5·00	10,38,630	+5,16,277	...	...	
1898	3,46,43,176	31,44,140	16,67,068	75,885	15,91,183	4·59	13,18,764	+2,72,419	...	...	
1899	3,80,27,533	34,24,808	14,42,101	61,940	13,80,161	3·63	14,62,603	− 82,442	...	...	
1900	4 30,15,249	36,47,197	15,66,413	49,563	15,16,850	3·53	16,19,231	−1,02,381	...	...	
1901	4,61,91,293	43,16,760	22,75,660	76,853	21,98,807	4·76	17,67,799	+4,31,008	...	...	
1902	4,91,41,200	45,50,632	24,55,201	86,671	23,78,530	4·84	18,77,205	+5,01,325	...	...	Includes Sagauli-Raxaul branch from 11th April 1904.
1903	5,63,63,468	56,72,952	31,92,619	1,04,369	30,88,250	6·07	19,86,515	+11,01,735	...	...	
1904	5,64,95,579	62,63,114	34,98,567	1,14,862	33,83,705	5·99	21,48,021	+12,35,684	...	...	

Sagauli-Raxaul branch, before it was purchased by the State.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	1,26,044	...	...	...	...	...
1897	6,68,783	...	...	...	...	...
1898	8,07,550	...	...	...	...	...
1899	10,81,740	5,433	Credited to interest on capital	...	30	40·00
1900	12,12,073	25,830		...	30	52·62
1901	10,67,014	97,182	18,598	1·37	40	62·44
1902	11,73,421	39,296	18,693	1·74	42	52·57
1903	11,16,252	43,809	18,571	1·66	51	57·61
1904 (up to 10th April)	11,16,252	16,740	10,114	0·91	74	46·03

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads (a) and (b)}}$. **BENGAL DOOARS RAILWAY SYSTEM.**

Lines comprising system—The Bengal Dooars railway system is made up of—

	Open line. Miles.
(*a*) Bengal Dooars railway (3' 3¾" gauge)	36·40
(*b*) Bengal Dooars extensions (3' 3¾" gauge)	116·56
Total	152·96

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

14 (*a*) Bengal Dooars railway proper (3' 3¾" gauge).

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Main line—				
East Bank of the Teesta to Dam Dim	May 1891	15-1-93	31·00	31·00
Branch—				
Lataguri to Ramshaihat	May 1891	11-6-93	5·40	5·40
TOTAL	...	...	...	36·40

Details of construction—

Permanent-way.—The line has been laid with 41½lb. flat-footed steel rails, 24 feet long, on sal sleepers, 9 to a rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432·50 feet radius, 1,425 feet long, at chain 2·67.

Gradients.—The ruling gradient is 1 in 1,000.

Terms of contracts—

The Bengal Dooars railway and the extensions are worked under the following contracts:—

Contracts of—27th April 1891.—Bengal Dooars railway principal contract.

2nd March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Malbazar-Hantupara extension).

The general conditions of the contracts are as follows:—

Government aid.—Land free of cost from Government, and from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs. 4,000 per annum as may be required to make up the net profits of the undertaking to five per cent. per annum on the capital outlay.

Currency of contracts.—On the 31st December 1919, and thereafter at intervals of seven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bengal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent. the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If at any period the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working.—If worked by the Company, the whole of the profits go to the Company. If worked by the Eastern Bengal State railway, the Secretary of State retains each half-year 40 per cent. of the gross earnings, the remaining 60 per cent. being paid to the Company after deduction of income-tax payable to Government.

Rates and fares—

Bengal Dooars railway and extensions from Mal to Madari Hat and Dam Dim to Bagrakote.—

Certain maxima and minima have been fixed subject to alteration from time to time. If gross receipts reach 12 per cent. on capital, Government may reduce maxima to the extent of 25 per cent. except certain special rates.

Extension from Barnes Junction to Lalmonir Hat—

Certain maxima and minima have been fixed within which charges can be made.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads (a) and (b)}}$ **BENGAL DOOARS RAILWAY SYSTEM**—*contd.*

14 (*a*) Bengal Dooars railway proper (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1891	16,479	...	...	...	...	...	...	...	...
1892	12,67,626	...	...	...	...	...	...	...	...
1893	18,49,091	1,14,812	57,639	3·12	...	57,639	3·12	69	49·80
1894	22,81,324	2,05,286	1,04,291	4·57	4,000	1,44,291	6·32	109	49·20
1895	23,26,476	3,53,537	1,27,458	5·48	4,000	1,31,458	5·65	125	49·73
1896	24,33,213	2,70,450	1,31,813	5·42	...	1,31,813	5·42	136	51·26
1897	26,50,713	2,86,407	1,45,289	5·48	...	1,45,289	5·48	145	49·27
1898	26,68,050	2,69,089	1,10,620	4·15	4,000	1,14,620	4·30	135	57·40
1899	26,26,748	2,73,037	1,18,416	4·51	...	1,18,416	4·51	137	55·41
1900	26,42,695	3,32,730	1,89,461	7·17	...	1,89,461	7·17	168	43·06
1901	26,44,873	3,10,920	1,76,399	6·67	...	1,76,399	6·67	156	43·27
1902	26,50,527	2,73,340	1,71,455	6·47	...	1,71,455	6·47	144	37·27
1903	26,95,547	3,09,965	2,23,786	8·30	...	2,23,786	8·30	156	27·80
1904	26,64,643	3,46,277	2,56,651	9·63	...	2,56,651	9·63	175	25·88

14 (*b*) Bengal Dooars railway extensions (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.	Remarks.
Main line—			Miles.	Miles.		Miles.	
Eastern extension—							
Mal to Chalsa		1-4-01	5·40				
Chalsa to Chengmari		1-1-03	13·45		1900	66	
Chengmari to Dalgaon		23-3-03	15·84		1901	74	Chalsa to Madari Hat section closed to traffic owing to breaches by floods from 28th June 1903 and reopened: Chalsa to Chengmari, 23rd October 1903 and Chengmari to Madari Hat, 16th November 1903, and again stopped on account of floods and breaches on 30th May 1904 and booking of traffic subsequently resumed from Chalsa to Chengmari on 23rd June 1904, Chengmari to Binaguri on 20th September 1904, and Binaguri to Madari Hat on 1st October 1904.
Dalgaon to Madari Hat		14-6-03	9·31		1902	78	
					1903	116	
			44·00	...	1904	116	
Southern extension—							
Barnes junction to Baura		20-4-00	28·30				
Baura to Bhotemari	2-3-98	21-10-00	16·70				
Bhotemari to Lalmonir Hat		20-11-00	20·80				
			65·80				
Western extension—							
Dam Dim to Oodlabari		1-5-01	3·30				
Oodlabari to Bagrakote		1-1-02	3·46				
			6·76				
TOTAL	...	...	...	116·56			

Details of construction—

Permanent-way.—The line has been laid with 41½lb. flat-footed steel rails, 30 feet long, on sal sleepers, 11 to a rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius, 1,300 feet long, at chain 14·00, on the Eastern extension; 300 feet long, at chain 3,471·00 on the Southern extension; and 1,785 feet long, at chain 353·17, on the Western extension.

Gradients.—The ruling gradient of the Southern and Eastern extensions is 1 in 200 and that of the Western extension, 1 in 100.

Terms of contracts.—See under Bengal-Dooars railway proper, page 188.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	72,151	...	...	...	...	...
1898	4,08,611	...	...	...	...	...
1899	26,75,455	...	...	...	...	...
1900	47,11,632	16,191	5,015	0·11	13	72·31
1901	62,26,567	1,76,399	66,937	1·11	47	69·92
1902	72,66,166	2,58,634	86,266	1·19	62	65·99
1903	79,30,172	3,47,832	1,05,916	1·34	71	69·55
1904	84,97,571	4,15,179	1,06,660	1·26	68	73·85

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 15.}}{\text{Sub-heads } (a) \text{ to } (d)}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM.**

Lines comprising system.—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

		Open line. Miles.
(*a*) Bhavnagar-Gondal-Junagad-Porbandar railway	(3′ 3⅜″ gauge)	334·19
(*b*) Dhrangadra railway	(3′ 3⅜″ gauge)	20·83
(*c*) Jamnagar railway	(3′ 3⅜″ gauge)	54·22
(*d*) Jetalsar-Rajkot railway	(3′ 3⅜″ gauge)	46·21
	Total	455·45

15 (*a*) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3′ 3⅜″ gauge).

This line was constructed by Government agency and is owned and worked by the Native States after which it is named.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Bhavnagar to Wadhwan	19-3-79	20-12-80	105·03		1880	105	The following lengths are worked for goods traffic only.
Dhola to Dhoraji	19-3-79	19-1-81	88·89		1881 to 1887	194	The Bhavnagar-Dock estate line, 1·03 miles, between Bhavnagar and Wadhwan.
Dhoraji to Porbandar	24-1-88	17-12-89	69·07				
Porbandar to Porbandar Bandar.		15-3-90	1·55		1888	210	Porbandar to Porbandar Bandar.
Jetalsar to Junagad	24-12-86	1-9-88	16·00		1889	332	Junagad quarry line, 2·35 miles.
Junagad to Veraval (including Junagad quarry line)		1-2-89	53·35		1890 to 1904	334	Veraval to Veraval Bandar.
Veraval to Veraval Bandar.		1-12-90	0·30				
Total	...	...	...	334·19			

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 24 feet long, laid on creosoted pine and deodar sleepers, except on the Dhoraji-Porbandar section where the rails are laid on steel pea pod sleepers. There are 9 sleepers to a rail.

Ballast.—The line is ballasted with a good quality of broken stone with the exception of the length between Bhavnagar and Wadhwan which is ballasted with kunkur.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 1,200 feet radius, 1,400 feet long, on the Jetalsar-Veraval section.

Gradients.—The ruling gradient is 1 in 200 except on the Jetalsar-Veraval section, where it is 1 in 150.

Terms of contracts—

The Bhavnagar-Gondal-Junagad-Porbandar railway system is worked under the following agreements :—

Agreements of—1st January 1897.—For the management and working of the "Integral railways" as one system by a Board of Control.

1st June 1898—Dhrangadra railway—
8th April 1897—Jamnagar railway—
12th April 1893—Jetalsar-Rajkot railway— } For management and working by the Bhavnagar-Gondal-Junagad-Porbandar Railway Administration.

The general conditions of the agreements are as follows :—

Government aid.—Nil.

Terms of agreement.—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary States of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those States are separately and entirely described as the "Integral railways" and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of votes recorded ("Members' single votes" and "Proprietary votes"). "Members' single votes" prevail at special meetings where each member has one vote, while "Proprietary votes," *i.e.*, votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

Currency of agreement.—The term of the principal agreement for the working of the Bhavnagar-Gondal-Junagad-Porbandar railway proper is from the 1st January 1897 to the 31st December 1900. Until a new agreement has been adopted, the terms of this agreement remain in force.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 15}}{\text{Sub-heads (a) to (d)}}$ **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

15 (*a*) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Power of Board to determine agreement.—By unanimous vote, the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary State can terminate the agreement after the 31st December 1900, subject to 12 months' notice at the beginning of the year.

Terms of working.—Bhavnagar-Gondal-Junagad-Porbandar railway.—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the Capital and Revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways, as may require apportionment, is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, all receipts of the entire open system being paid into the Bhavnagar State Treasury. All funds for major capital works are provided by the integral railway concerned or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent. per annum for any additional accommodation required by the open system.

Dhrangadra railway—
Jamnagar railway—
Jetalsar-Rajkot railway—

The Board of Control work the railways at 40 per cent. of gross earnings of each railway *plus* actual expenditure incurred on the maintenance of way, works and stations; and supply rolling-stock at 5 per cent. of gross earnings to the Jetalsar-Rajkot and Dhrangadra railways.

Rates and Fares.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system, but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	4,80,177	...	...	...	...	...
1880	49,19,304	...	...	...	...	...
1881	74,46,353	6,58,385	2,31,706	3·11	78	70·18
1882	86,75,711	8,76,836	3,54,648	4·09	87	59·55
1883	90,49,232	8,94,179	3,26,513	3·61	89	63·47
1884	92,92,040	10,92,312	4,98,107	5·36	109	54·46
1885	96,25,081	10,04,660	3,91,247	4·07	98	59·55
1886	98,57,553	9,65,379	4,15,149	4·21	96	57·00
1887	1,08,28,023	9,80,827	4,42,103	4·08	98	54·93
1888	1,30,68,668	11,20,260	5,06,545	3·88	109	50·58
1889	1,62,60,477	13,80,417	7,04,177	4·33	97	56·55
1890	1,68,42,051	15,71,788	6,00,267	3·56	91	61·81
1891	1,71,24,771	14,77,263	4,75,786	2·78	85	67·79
1892	1,72,52,030	15,78,178	4,37,876	2·54	91	72·25
1893	1,72,28,860	20,63,104	8,88,708	5·16	119	56·92
1894	1,73,65,592	18,40,287	7,91,335	4·56	106	49·61
1895	1,76,00,032	19,52,221	8,21,220	4·67	113	57·93
1896	1,75,63,395	19,80,878	9,89,274	5·63	114	50·06
1897	1,76,53,652	13,21,640	8,19,081	4·64	105	55·04
1898	1,78,56,546	16,96,657	7,09,781	3·98	97	58·22
1899	1,79,56,272	18,53,483	9,26,935	5·16	107	49·99
1900	1,80,00,616	19,53,865	10,10,773	5·62	113	48·27
1901	1,80,96,671	15,37,378	6,80,089	3·76	89	55·76
1902	1,80,87,538	13,71,837	5,66,342	3·13	79	58·73
1903	1,81,53,314	16,04,638	8,36,670	4·61	92	47·86
1904	1,80,44,250	18,60,565	10,39,916	5·76	107	44·11

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 15}}{\text{Sub-heads (a) to (d)}}$ **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

15 (*b*) Dhrangadra railway (3′ 3⅜″ gauge)—

This line was constructed for the Dhrangadra state by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Wadhwan Junction to Dhrangadra	23-12-97	1-6-98	20·83	20·83

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 24 feet long, laid on deodar sleepers, 9 to a rail.

Ballast.—The ballast used is of broken hard sand-stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,400 feet radius, 848 feet long, situated inside the distant signal at Wadhwan.

Gradients.—The ruling gradient is 1 in 175.

Terms of contracts.—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, pages 190 and 191.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	5,830	...	...	...	...	...
1898	5,93,589	23,895	10,617	1·79	37	54·62
1899	6,06,104	63,876	20,978	3·46	59	67·16
1900	5,86,584	57,366	18,984	3·24	53	66·91
1901	5,86,100	46,196	11,765	2·01	43	74·53
1902	5,85,911	37,731	8,075	1·38	35	78·60
1903	5,86,638	43,058	11,713	1·99	40	72·80
1904	5,87,116	47,516	15,446	2·63	44	67·49

15 (*c*) Jamnagar railway (3′ 3⅜″ gauge)—

This line was constructed for the Navanagar state by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Remarks.
			Miles.	Miles.	
Rajkot Junction to Bedi Bandar .	Oct. 1893	8-4-97	54·22	54·22	The Bedi Bandar Dock estate line, 3·93 miles, is worked for goods traffic only.

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 24 feet long, laid on creosoted pine and deodar sleepers, 9 to a rail.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard where it is fenced with barbed wire and masonry walling.

Curves.—The sharpest curve is of 3,000 feet radius. There are 5 such curves of lengths varying from 225 to 350 feet, at miles 9, 13, 28, 32 and 36.

Gradients.—The ruling gradient is 1 in 200.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 15.}}{\text{Sub-heads (a) to (d)}}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*concld.***

15 (*c*) Jamnagar railway (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, pages 190 and 191.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	17,000	...	...	...	...	...
1895	62,956	...	...	...	...	...
1896	14,91,727	...	...	...	...	...
1897	22,50,538	84,476	28,954	1·29	41	65·73
1898	23,18,496	1,02,945	31,762	1·37	36	69·12
1899	25,08,558	1,26,323	51,540	2·23	53	59·20
1900	23,09,481	1,49,153	59,540	2·56	53	60·09
1901	23,09,969	1,36,314	51,401	2·22	48	62·29
1902	23,58,240	1,31,104	53,751	2·28	46	59·00
1903	23,58,338	1,39,756	60,122	2·55	50	56·98
1904	23,27,281	1,41,030	56,721	2·44	58	59·78

15 (*d*) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)—

This line was constructed for the Jetalsar-Rajkot Railway syndicate by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Jetalsar Junction to Rajkot	Feb. 1892	12-4-93	46·21	46·21

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails, 24 feet long, laid on creosoted pine sleepers, except for five miles where the rails are laid on steel trough sleepers. There are 9 sleepers to a rail.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except between Rajkot Para and Rajkot Junction, where there is masonry walling and a wooden fence.

Curves.—The sharpest curve is of 955 feet radius, 420 feet long at mile $\frac{45}{12-13}$.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, pages 190 and 191.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	7,89,792	...	...	...	...	...
1893	14,35,593	1,03,006	50,896	3·55	59	50·59
1894	14,99,695	1,55,556	61,152	4·08	65	60·68
1895	15,03,585	1,33,338	77,448	5·15	76	57·76
1896	15,-9,265	1,97,116	84,238	5·51	82	57·26
1897	15,47,463	2,05,233	84,720	5·47	85	58·72
1898	15,78,017	1,78,941	76,057	4·82	74	57·50
1899	15,83,268	1,98,927	78,726	4·97	45	60·43
1900	15,74,083	2,02,718	86,214	5·48	84	57·47
1901	15,71,038	1,76,388	67,251	4·27	73	61·87
1902	15,78,583	1,44,817	54,485	3·45	60	62·25
1903	15,78,658	1,66,404	68,230	4·01	69	63·00
1904	15,78,655	1,88,439	69,248	4·39	78	63·25

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 16}}{\text{Sub-heads } (a) \text{ \& } (b)}$. **BURMA RAILWAYS SYSTEM** (3′ 3½″ gauge)—

Lines comprising system.—The Burma railways system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Burma railways	1,340·15	...	1,340 15
(*b*) Burma railways extensions	...	186·93	186·93
		Total	1,527·08

16 (*a*) Burma railways proper (3′ 3½″ gauge).

The Burma Railway Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3′ 3½″ gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
IRRAWADDY SECTION—					1877	161
Rangoon to Prome	25-9-74	2-5-77	161·00		1878	161
TOTAL, IRRAWADDY SECTION	...	...	...	161·00	1879	161
SITTANG SECTION—					1880	167
Main line—					1881	167
Rangoon to Pegu	23-5-81	4-2-84	46·25			
Pegu to Pyuntaza		4-2-84	41·75		1882	167
Pyuntaza to Nyaunglebin		4-2-84	5·00		1883	167
Nyaunglebin to Toungoo		1-7-85	73·00		1884	260
Total Main line	...	...	166·00		1885	333
Branches—					1886	333
Suburban lines	25-9-74	1-3-80	6·00		1887	333
		15-7-90	3·00		1888	441
Total Branches	...	...	9·00		1889	553
TOTAL, SITTANG SECTION	...	...	...	175·00	1890	556
MANDALAY SECTION—					1891	617
Main line—					1892	717
Toungoo to Pyinmana	October 1886.	1-5-88	59·00		1893	730
Pyinmana to Yamethin		15-11-88	49·00		1894	745
Yamethin to Mandalay		1-3-89	112·00		1895	834
Total Main line	...	...	220·00		1896	886
Branches—					1897	887
Myingyan branch—					1898	936
Thasi to Meiktila Cantonment	1-1-92	10-5-93	12·89		1899	993
Meiktila to Myingyan	Sept. 1898	15-11-99	57·21		1900	1,124
			70·10		1901	1,178
Mandalay Shore Branch—					1902	1,261
Mandalay to Mandalay shore	...	April 1889	2·50		1903	1,337
Total Branches	...	...	72·60		1904	1,340
TOTAL, MANDALAY SECTION	...	...	...	292·60		
MU VALLEY SECTION—						
Main line—						
Sagaing to Shwebo	Sagaing to Kawlin 17-10-89; Kawlin to Nankan in Feb. and March 1891.	1-7-91	53·05			
Shwebo to Wuntho		4-4-92	99·46			
Wuntho to Nankan		1-11-94	15·46			
Nankan to Mohnyin	Sept. 1892.	21-10-95	74·35			
Mohnyin to Mogaung		1-3-96	52·34			
Mogaung to Myitkyina	Dec. 1895	1-1-98	36·63			
Total Main line ...	...	...	331·29			
Branches—						
Sagaing to Alon	Sept. 1898	15-4-00	70·46			
Myohaung branch—						
Myohaung to Amarapura shore	17-10-89	22-11-91	6·00			
Katha branch—						
Nabha to Katha	...	2-10-95	15·00			
Total Branches	...	...	91·46			
TOTAL, MU VALLEY SECTION	...	...	...	422·75		
MANDALAY-KUNLONG SECTION—						
Myohaung to Sedaw	Oct. 1895	1-1-98	13·45			
Sedaw to Maymyo		1-4-00	26·10			
Maymyo to Nawnghkio		20-5-00	34·10			
Nawnghkio to Hsipaw		1-6-01	53·25			
Hsipaw to Lashio		1-3-03	50 94			
TOTAL, MANDALAY-KUNLONG SECTION	...	...	...	177·84		
Total, Carried over	...	...	...	1,229·19		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 16}}{\text{Sub-heads (a) and (b)}}$. **BURMA RAILWAYS SYSTEM** (3′ 3¼″ gauge)—*contd.*

16 (*a*) Burma railways proper (3′ 3¼″ gauge)—*contd.*

Progress in opening—*contd.*

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Brought forward	...	...	...	1,229·19
BASSEIN-HENZADA-LETPADAN SECTION—				
Bassein to Henzada	7-9-99	15-12-02	32·25	
Henzada to Henzada shore		20-3-03	2·46	
Tharawaw branch—				
Letpadan (on Irrawaddy line) to Tharawaw on the east bank of the Irrawaddy river		20-3-03	23·07	
Suburban lines at Bassein		15-1-04	3·18	
TOTAL, BASSEIN-HENZADA-LETPADAN	...	...	...	110·96
GRAND TOTAL, BURMA RAILWAYS	...	...	...	1,340·15
DOUBLE LINE—OPEN—				
Rangoon to Kemmendine	...	30-10-89	3·50	
Kemmendine to Insein	...	10-1-90	5·50	
Myohaung to Mandalay	...	3-10-99	2·45	
Rangoon to Pazundaung	...	1-6-01	0·70	
Total double line—Open	...	...	12·15	
DOUBLE LINE—UNDER CONSTRUCTION—				
Insein to Hlawga	10-11-03	...	7·93	
Pazundaung to Thingangyun	16-9-03	...	3·40	
Total double line—Under construction	...	...	11·37	

Details of construction—

Permanent-way.—The Irrawaddy line is laid with steel rails, 50 lb. to the yard, for a double track from Rangoon to Insein (9 miles), the remaining 152 miles being laid for a single track with 50 lb. steel rails for 123 miles, and 41¼ lb. steel rails for 29 miles. The Sittang line is laid with steel rails, 50 lb. to the yard, from Pazundaung to Deiku (81 miles), the remaining 35 miles being laid with rails, 41¼ lb. to the yard. The Mandalay line consists of 50 lb. flat-footed steel rails, with deep web fishplates of Bessemer steel. The Myingyan branch is laid with steel rails, 41¼ and 50 lb. to the yard. The Mu Valley line is laid with 41¼ lb. flat-footed steel rails, with the exception of the Alon branch, where the rails are mostly 50 lb. The Mandalay-Kunlong line and the Bassein-Henzada-Letpadan branch are laid with steel rails, 50 lb. to the yard. The sleepers throughout are generally of teak, pyinma and pyinkado, the last named largely predominating. The number of sleepers per rail varies from 9 to 12.

Ballast.—The ballast used is either shingle or broken stone.

Fencing.—The main line (Rangoon to Mandalay) and the Irrawaddy line (Rangoon to Prome) are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunlong section is unfenced. On the Bassein-Henzada line, the Bassein and Henzada station yards are fenced and the work of fencing the whole length is now in progress.

Curves.—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet and 1,100 feet in length while that on the Rangoon-Prome section has a radius of 1,146 feet and is 2,900 feet long. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Meiktila-Myingyan and Sagaing-Alon branches have radii 955, 1,432, 1,273 and 2,865 feet and are 1,600, 1,700, 1,300 and 9,100 feet in length respectively. On the Lashio branch the sharpest curve has a radius of 337 feet. On the Mu Valley line there are in all 13 curves of a radius of 573 feet, the sharpest on the line, four on the Katha branch between miles 212 and 213·8, the total length being 1,568 feet, and 9 on the main line between miles 171 to 235 on the Nankan-Mohyin section, the total length being 3,790 feet.

Gradients.—The ruling gradient on the main line is 1 in 200, uncompensated, on the Lashio branch, it is 1 in 25 compensated; on the Mu Valley, 1 in 60, uncompensated; on the Myingyan branch, 1 in 100 uncompensated; and on the Sagaing-Alon branch, 1 in 150 uncompensated.

Terms of contract—

The railways are worked under the following contract:—

Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.

The general conditions of the contract are as follows:—

Government aid.—Interest is guaranteed at 2½ per cent. on the Company's share capital. Land was provided free of charge.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract, on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause, the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—

(1) The equivalent of the interest paid for the half-year on any debentures issued by the Company;

(2) The equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 16}}{\text{Sub-heads (a) and (b)}}$. **BURMA RAILWAYS SYSTEM** (3′ 3⅜″ gauge)—*concld.*

16 (*a*) Burma railways proper (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

(3) The equivalent of interest at 2½ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government;

After payment of the interest above-mentioned any surplus, which may remain unpaid in a year ending on the 30th June, to be divided between Government and the Company, in the proportion of four-fifths to the former and one-fifth to the latter.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1877	...	...	...	...	...	...	...	61	129·36
1878	...	...	...	...	...	...	...	115	93·03
1879	1,22,86,597	9,55,913	1,41,743	1·14	5,47,438	...	—4,05,695	114	85·17
1880	1,25,87,340	13,22,710	5,21,085	4·14	5,62,331	...	—41,246	158	60·60
1881	1,36,51,992	15,43,622	6,45,077	4·73	5,86,210	...	+58,867	184	58·21
1882	1,78,39,222	15,75,691	6,30,490	3·53	6,23,969	...	+6,461	188	59·99
1883	2,19,77,689	15,62,886	5,60,766	2·55	7,46,068	...	—1,85,302	187	64·66
1884	2,56,37,089	21,05,421	8,21,986	3·21	9,69,215	...	—1,47,279	181	60·96
1885	2,72,85,343	21,63,656	4,73,123	1·73	10,61,184	...	—5,88,061	143	78·18
1886	2,88,52,604	26,57,955	9,41,149	3·26	12,64,242	...	—3,23,093	156	64·51
1887	3,66,52,847	33,24,263	15,58,303	4·25	13,15,249	...	+2,43,054	192	53·12
1888	4,33,73,677	33,76,218	12,71,960	2·93	18,18,560	...	—5,46,600	171	62·33
1889	5,12,49,158	46,90,263	15,73,552	3·07	20,17,224	...	—4,43,672	169	66·45
1890	5,56,22,296	54,71,432	23,48,191	4·22	21,35,308	...	+2,12,883	210	57·08
1891	6,08,31,289	58,55,197	23,71,392	3·90	23,28,287	...	+43,105	199	59·50
1892	6,64,02,875	71,00,618	33,86,088	5·10	24,90,221	...	+8,95,867	237	52·31
1893	7,03,47,005	67,22,506	22,43,492	3·19	27,19,995	...	—4,77,503	178	66·64
1894	7,37,14,721	62,37,354	23,23,328	3·15	28,94,375	...	—5,71,047	164	63·05
1895	7,57,29,650	67,11,062	27,02,356	3·57	30,01,163	...	—2,98,807	169	59·73
1896	8,15,44,229	76,08,558	29,85,751	3·67	34,43,442	...	—4,57,691	167	60·76
1897	8,73,81,890	86,76,403	38,82,673	4·45	38,31,674	1,63,877	—1,11,878	188	55·25
1898	9,24,98,509	89,91,451	37,88,523	4·10	39,49,899	1,61,076	—3,22,452	184	57·87
1899	10,11,17,647	88,25,724	35,78,407	3·54	38,35,209	1,24,904	—3,81,706	179	59·45
1900	11,33,96,635	1,10,29,947	48,94,824	4·43	38,49,026	3,47,606	+6,98,192	195	55·62
1901	11,99,22,408	1,18,35,329	49,59,656	4·16	40,41,106	4,42,439	+5,06,109	197	58·02
1902	12,70,23,590	1,25,02,671	52,72,683	4·66	43,94,823	4,69,365	+4,08,495	203	57·83
1903	13,01,30,277	1,36,14,478	52,19,322	4·01	44,06,500	4,32,246	+3,80,576	197	61·66
1904	13,38,28,678	1,51,02,418	65,70,760	4·92	44,71,268	5,92,997	+15,06,495	216	56·49

16 (*b*) Burma railways extension (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Pegu to Martaban	27-11-03	...	121·27	
Henzada to Kyangin	5-5-04	...	65·66	
Total	...	...	...	186·93

These lines are under construction.

Number $\frac{\text{Main head 17}}{\text{Sub-head (a)}}$. **DEOGHUR RAILWAY** (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Baidyanath to Deoghur	October 1881	23-12-82	4·79	4·79

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 17}}{\text{Sub-heads (a) and (b)}}$. **DEOGHUR RAILWAY** (3′ 3½″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way is laid with 36-lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 2,640 feet and extends over a length of 3,000 feet.

Gradients.—The ruling gradient is 1 in 80 except in the 2nd mile, where it is 1 in 60.

Terms of contract—

The railway is worked under the following contract:—

Contract of—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Land alone was provided free of charge.

Terms of contract.—Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fails to perform its obligations, and take over the railway at a valuation based on the earnings for the two years immediately previous to such resumption. Government may also determine the contract after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years, by giving 12 months' notice, and take over the railway at a valuation calculated at the average market rate of the shares during the previous three years, together with bonus not exceeding 20 per cent. of such value.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	2,73,331	19,639	6,242	2·28	79	68·00
1884	2,75,000	23,735	10,704	3·90	83	54·90
1885	2,75,000	23,987	9,908	3·60	88	58·69
1886	2,75,042	25,017	11,743	4·27	100	53·06
1887	2,75,043	24,532	12,108	4·40	98	50·64
1888	2,81,180	25,812	11,521	4·10	104	55·37
1889	2,82,876	28,533	12,695	4·49	115	55·51
1890	2,82,616	26,095	10,915	3·86	105	58·17
1891	2,82,752	31,165	15,429	5·46	125	50·49
1892	2,88,329	26,964	9,707	3·37	108	64·00
1893	2,87,364	37,809	19,103	6·65	152	49·47
1894	2,87,526	29,425	9,659	3·36	118	67·17
1895	2,88,086	33,611	15,308	5·31	130	54·46
1896	2,87,797	30,014	11,498	4·00	120	61·69
1897	2,87,942	30,320	11,152	3·87	122	63·22
1898	2,88,453	32,100	6,601	2·28	129	79·44
1899	2,87,525	33,262	6,678	2·32	134	79·92
1900	2,87,379	34,900	7,376	2·56	140	78·87
1901	2,85,265	48,293	18,616	6·53	194	61·45
1902	3,01,057	29,758	6,025	2·00	120	79·75
1903	3,01,057	40,458	10,622	3·53	162	73·75
1904	3,01,057	46,635	14,701	4·88	187	68·48

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) and (b)}}$. **DIBRU-SADIYA RAILWAY SYSTEM—**

Lines comprising system.—The Dibru-Sadiya railway system is made up of—

	Open line. Miles.
(a) Dibru-Sadiya railway (3′ 3½″ gauge)	77·50
(b) Ledo and Tikak-Margherita Colliery railway (3′ 3½″ gauge)	8·50
Total	86·00

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) and (b)}}$. **DIBRU-SADIYA RAILWAY SYSTEM—*contd.***

18 (*a*) Dibru-Sadiya railway proper (3′ 3⅜″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh, eastward as far as the Dinjan stream		Aug. 1882	15·00		1882	15
Dinjan stream to Makum Junction	1881	16-7-83	23·50		1883	38
Makum Junction to Dihing bridge		2-5-84	23·00		1884	71
Total Main line	...	...	...	61·50		
Talap branch—						
Makum Junction to Dum-Duma	1881	2-5-84	10·00		1885 to 1904	77
Dum-Duma to Talap		5-2-85	6·00			
Total Branch	...	...	...	16·00		
Grand Total	...	...	...	77·50		

Details of construction—

Permanent-way.—The line throughout was laid originally with flat-footed steel rails, 41½ lb. to the yard, 24 feet long; they are now being replaced gradually by 50-lb. flat-footed steel rails, 30 feet long. The sleepers are chiefly uriam, 10 to a 24 feet and 12 to a 30 feet rail; but about 30,000 cast iron plate sleepers of the Denham-Olpherts' type are distributed throughout the main line, three being put into each rail length.

Ballast.—The line is unballasted for one mile from Lower Steamer Ghat (Dibrugarh) and for 16 miles between Makum Junction and Talap. On the rest of the line, broken stone ballast has been used.

Fencing.—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves.—The sharpest curve is of 700 feet radius, 630 feet long, at mile 61½.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company) for maintenance and working.

25th July 1881—Contract modifying that of 1880.

The general conditions of the contracts are as follows:—

Government aid.—Government guarantee payment of a subsidy, not exceeding in any year Rs. 80,000, twelve months after the opening of the main line throughout or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line. Similarly, Government guarantee a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The free use of public roads is also provided for.

Currency of contract.—If the Company fails to fulfil its obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. If the Company does not maintain or work the railway for any time over fourteen days in any year, Government can deduct from the subsidy Rs. 210 in the case of the main line and Rs. 262 in the case of both main line and Makum branch, each day, and in default Government will be discharged from all liabilities or obligations under this contract and can call on the Company to remove all rails, etc., and give up possession of the lands, roads, etc., the Company bearing all expense in restoring the same to their original condition. Government may also determine the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

Note.—The Company having waived all its rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

Power of Company to surrender contract.—Nil.

Terms of working.—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares.—To be approved by Government from time to time while subsidy is payable. If the net profits exceed 12 per cent of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) and (b)}}$. **DIBRU-SADIYA RAILWAY SYSTEM—*contd.***

18 (*a*) Dibru-Sadiya railway proper (3′ 3½″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from local Government.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1883	22,22,253	48,220	—35,375	...	...	—35,375	...	52	171·70	
1884	40,65,288	2,06,133	—68,446	...	54,550	—13,856	...	67	131·61	
1885	49,46,729	2,57,335	—63,864	...	54,500	—9,364	...	62	123·03	
1886	49,73,753	3,46,479	53,154	1·07	54,654	1,07,808	2·17	81	89·65	
1887	53,32,605	4,04,928	1,02,540	1·92	1,00,000	2,02,540	3·80	94	74·68	
1888	53,73,445	4,25,530	1,01,759	1·89	1,00,000	2,01,759	3·75	105	76·09	
1889	55,15,750	4,64,018	1,25,147	2·27	1,00,000	2,25,147	4·08	114	72·26	
1890	57,06,682	5,14,256	1,76,960	3·10	1,00,000	2,76,960	4·85	127	65·59	
1891	67,05,474	4,98,632	1,70,526	2·54	1,00,000	2,70,526	4·03	123	65·80	
1892	69,56,304	5,13,218	1,63,719	2·35	1,00,000	2,63,719	3·79	127	63·10	
1893	71,70,562	5,12,098	1,52,972	2·13	1,00,000	2,52,972	3·53	127	70·13	
1894	70,97,487	5,31,645	1,95,732	2·76	1,00,000	2,95,732	4·17	152	63·18	
1895	74,02,729	6,01,142	2,69,543	3·64	1,00,000	3,69,543	4·99	149	55·16	
1896	74,01,496	6,47,360	3,12,286	4·22	1,00,000	4,12,286	5·57	161	51·76	
1897	74,20,119	7,74,189	2,64,750	3·57	1,00,000	3,64,750	4·92	192	68·12	
1898	74,40,474	7,81,415	2,82,478	3·80	50,000	3,32,478	4·33	194	63·85	
1899	74,56,183	8,59,414	4,49,688	6·03	37,978	4,87,666	6·54	213	47·68	The amount shown as subsidy received during 1899 was due for a previous period.
1900	77,14,349	9,00,817	4,62,381	5·99	...	4,62,381	5·99	224	48·67	
1901	82,00,747	9,28,578	4,73,307	5·77	...	4,73,307	5·77	230	49·03	
1902	82,00,694	8,51,880	4,11,187	5·01	...	4,11,187	5·01	211	51·73	
1903	82,32,580	9,16,777	4,57,974	5·56	...	4,57,974	5·56	227	50·05	
1904	87,01,363	9,48,473	4,21,317	4·84	...	4,21,317	4·84	235	55·58	

18 (*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3½″ gauge)—

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—						
Dihing Bridge to Ledo	...	17-2-84	5·50			
Namdang branch—						
Margherita to Namdang	...	1-1-01	3·00		1884 to 1900	8
Total	...	...	...	8·50	1901 to 1903	11
					1904	8

Details of construction—

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails, 30 feet long, on uriam sleepers, 12 to a rail.

Ballast.—The main line is three-fourths ballasted with broken stone, but the Namdang branch is unballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 800 feet radius, 700 feet long, and situated at mile 1 on the Namdang branch.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The railway is worked under the following contract:—

Contract of—30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms—Contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

The general conditions are as follows:—

Government aid.—Nil.

Currency of contract.—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles and for a further term of 30 years within an area of at least 4 square miles.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads } (a) \text{ and } (b)}$. **DIBRU-SADIYA RAILWAY SYSTEM—*concld.***

18 (*b*) Ledo and Tikak-Margherita Colliery railway. (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Power of Company to surrender contract.—Nil.

Terms of working.—The colliery to be charged with the cost of maintenance of the branch and sidings owned by it and 5 per cent. of its gross earnings for the use of rolling stock, all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings.

Rates and fares.—Certain rates have been sanctioned by Government for the carriage of goods.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	11,46,240	45,871	8,024	0·70	88	82·51
1898	12,00,698	55,313	3,752	0·31	142	93·22
1899	12,83,416	63,084	22,053	1·72	162	65·04
1900	12,84,375	65,724	17,981	1·40	169	72·64
1901	16,30,162	70,293	11,145	0·68	123	84·15
1902	16,53,446	58,259	437	0·03	102	99·25
1903	16,62,082	59,077	−8,208	...	103	113·89
1904	16,62,088	56,108	13,158	0·79	120	76·55

Number $\frac{\text{Main head 19}}{\text{Sub-heads } (a) \text{ to } (c)}$. **JODHPUR-BIKANER RAILWAY SYSTEM—**

Lines comprising system.—The Jodhpur-Bikaner railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) Jodhpur-Bikaner (Jodhpur section) (3′ 3⅜″ gauge)	454·94	8·95	463·89
(*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3⅜″ gauge)	245·35	...	245·35
(*c*) Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)	123·98	...	123·98
Total	824·27	8·95	833·22

19 (*a*) Jodhpur-Bikaner (Jodhpur section) (3′ 3⅜″gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—					1882	19
Marwar Railway Junction to Marwar Pali	1881	24-6-82	19·00		1883	
Marwar Pali to Luni Junction	1883	17-6-84	25·00		1884	44
Luni Junction to Jodhpur	1884	9-3-85	20·00		1885	64
Jodhpur to Merta Road	1890	8-4-91	64·00		1886	64
Merta Road to Kuchaman Road	July 1891	13-3-93	73·00		1887 to 1890	124
Luni Junction to Pachpadra	31-12-85	22-3-87	60·00			
Balotra to Barmer	Aug. 1897	15-5-99	60·00		1891	247
Barmer to the Jodhpur Frontier		22-12-00	74·44		1892	247
Merta Road to Nagour	1890	16-10-91	35·00		1893 to 1898	320
Nagour to Bhagu		9-12-91	24·50			
TOTAL	...	...	...	454·94	1899	380
LINE UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION.					1900 to 1904	455
Merta City branch—						
Merta Road to Merta City	29-4-04	18-1-05	8·95	8·95		
GRAND TOTAL	...	...	...	463·89		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$. **JODHPUR-BIKANER RAILWAY SYSTEM—*contd.***

19 (*a*) Jodhpur-Bikaner (Jodhpur section) (3′ 3³⁄₈″ gauge)—*concld.*

Details of construction—

Permanent-way—Between Kuchaman Road and Jodhpur and between Merta Road and Bhagu, the permanent-way consists of 36 lb. flat-footed steel rails, 24 feet long, laid on steel trough and deodar sleepers. From Jodhpur to Marwar Railway Junction, the line was laid originally with second hand 36 lb. flat-footed iron rails on jungle wood and half round creosoted pine sleepers. These have since been replaced by 41¼ lb. and 50 lb. flat-footed steel rails laid on deodar sleepers and for a short length on steel trough sleepers. The line between Balotra and the Frontier is laid with 50 lb. flat-footed steel rails and creosoted pine and steel trough sleepers. The permanent-way between Luni Junction and Balotra, which was laid originally with 36 lb. flat-footed steel rails, 21 feet long, on trough sleepers, has been re-laid with 50 lb. flat-footed steel rails on pine sleepers. The Balotra-Pachpadra section is laid with 36 lb. flat-footed steel rails, 24 feet long, on steel trough sleepers; the latter are being replaced gradually by deodar sleepers on account of the salt soil. The sleepers are 8 to a 21 feet, 9 to a 24 feet and 11 to a 30 feet rail. The Merta City branch has been laid with 36 lb. iron rails taken out of the main line, carried on 6 feet deodar sleepers and a proportion of deodar blocks averaging 2½ feet long as follows:— on the tangents 3 full 6 feet sleepers and 10 blocks to each pair of rails, and on the curve 5 full 6 feet sleepers and 6 blocks to each pair of rails.

Ballast—On the greater portion of the line the ballast consists of coarse sand and small kunkur; but on the Merta Road-Kuchaman Road section it is chiefly broken stone.

Fencing.—With the exception of a few stations, the line is practically unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—13th July 1889 } (between the Government of India and the Jodhpur and Bikaner Durbars) for
30th July 1889 } constructing and working the line.

The general conditions of the contracts are as follows:—

Government aid.—The line is the exclusive property of the two Durbars.

Currency of contracts.—These contracts may be modified at any time by mutual consent.

Terms of working.—Each Durbar to receive all the profits of the section of line belonging to the Durbar.

Rates and fares.—No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	4,99,866	40,361	23,110	4·62	42	42·74
1884	8,09,995	64,262	31,748	3·92	39	50·59
1885	15,40,335	1,70,691	1,12,505	7·30	54	34·30
1886	21,22,503	2,05,726	1,33,318	6·28	62	35·26
1887	22,81,433	3,18,703	1,91,677	8·40	55	39·86
1888	22,80,006	3,60,503	1,91,556	8·40	56	46·91
1889	22,73,978	3,59,358	1,92,258	8·45	56	46·50
1890	22,75,838	3,70,825	1,96,192	8·63	58	47·09
1891	41,87,110	6,12,889	3,34,364	7·99	66	45·44
1892	60,59,552	9,46,980	5,28,941	8·73	75	44·14
1893	64,74,611	8,31,765	4,33,985	6·70	52	47·83
1894	64,49,374	10,81,156	6,69,373	10·38	65	38·09
1895	64,32,234	9,74,738	5,69,246	8·85	58	41·60
1896	64,78,328	11,64,465	7,38,273	11·40	70	36·60
1897	74,90,176	11,22,638	7,44,799	9·94	67	33·66
1898	1,00,83,534	12,22,726	7,30,956	7·25	73	42·22
1899	1,18,42,183	19,09,097	11,66,814	10·29	102	38·88
1900	1,14,28,508	16,28,478	9,07,490	7·94	81	44·27
1901	1,17,24,806	15,67,078	7,14,826	6·10	66	54·39
1902	1,18,69,424	16,76,216	8,35,202	7·04	71	50·17
1903	1,19,31,439	16,34,708	8,91,196	7·47	69	45·48
1904	1,21,90,804	16,87,624	9,58,965	7·86	71	43·21

19 (*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3³⁄₈″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Bhagu to Bikaner	1890	9-12-91	43·50		1890 to 1897	44
Bikaner to Dulmera	Dec. 1895	2-6-98	42·00			
Dulmera to Lankaransar	27-1-98	1-1-01	8·32			
Lankaransar to Suratgarh	9-2-99		63·53		1898	86
Suratgarh to Bhatinda	15-7-99	9-9-03	88·00		1899	95
					1900	96
					1901	157
Total, Bikaner section	...	...	...	245·35	1902 to 1904	245

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$. **JODHPUR-BIKANER RAILWAY SYSTEM—*contd.***

19 (*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 36 lb. flat footed steel rails, laid on steel trough and deodar sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is practically unfenced except at a few stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

See under Jodhpur section, page 201.

Statistics of working—

Calendar year.	Table I. Capital outlay to the end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	4,15,590	...	...	...	...	...
1891	14,32,706	5,139	2,734	0·19	36	46·99
1892	9,48,622	76,547	24,904	2·63	34	67·47
1893	9,65,771	66,725	25,735	2·66	30	61·43
1894	9,69,407	80,274	40,447	4·17	35	49·61
1895	9,71,084	86,539	45,096	4·64	38	47·89
1896	9,73,294	1,20,727	75,382	7·75	53	37·56
1897	9,73,473	1,17,010	65,504	6·73	52	44·02
1898	23,14,152	1,37,472	77,616	3·35	31	43·54
1899	28,61,917	1,74,539	1,04,344	3·65	37	40·22
1900	32,60,432	1,92,358	1,04,962	3·22	43	45·43
1901	48,93,535	2,46,875	1,05,697	2·16	30	57·18
1902	52,49,339	3,22,022	1,42,580	2·72	30	55·72
1903	51,30,925	5,25,329	2,66,197	5·19	41	49·33
1904	50,93,549	7,23,901	4,05,677	7·96	57	43·96

19 (*c*) Jodhpur-Hyderabad (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement. Calendar year.	Mileage open.	Remarks.
			Miles.	Miles.		Miles.	
Jodhpur-Hyderabad (British section)—							
Hyderabad to Shadipalli	5-3-91	18-8-92	55·49		1892 to 1899	59	The line from Hyderabad to Shadipalli was originally on the 5′ 6″ gauge, but was converted to the 3′ 3⅜″ gauge and opened on the 20th October 1901.
Shadipalli to the Jodhpur Frontier	Aug. 1897	23-12-00	68·49				
Total, Jodhpur-Hyderabad (British section)	...	...	...	123·98	1900 to 1904	124	

Details of construction—

Permanent-way.—The Hyderabad-Shadipalli section is laid with 60 lb. iron rails on deodar sleepers, with the exception of 2 miles near Shadipalli which has been relaid with 50 lb. flat-footed steel rails. On the Shadipalli-Jodhpur Frontier section, about 14 miles east of Shadipalli are laid with 41¼ lb. flat-footed steel rails on Denham-Olpherts' cast-iron sleepers, and the remainder with 50 lb. flat-footed steel rails on deodar sleepers.

Ballast.—The ballast is of kunkur, stone and broken brick.

Fencing.—With the exception of a few stations, the line is practically unfenced.

Curves.—There are no curves with a radius less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3′ 3⅜″ gauge, from Balotra to Hyderabad and for working the section from the Jodhpur Frontier to Hyderabad.

The general conditions of the agreement are as follows:—

Currency of agreement.—As regards the working of the railway, this agreement remains in force until determined by either party, on 12 months' notice on the 1st day of January or the 1st day of June in any year.

Terms of working.—Working expenses, excluding maintenance, are divided between the British and Native State sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 19}}{\text{Sub-heads (a) to (c)}}$. **JODHPUR-BIKANER RAILWAY SYSTEM**—*concld.*

19 (c) Jodhpur-Hyderabad (British section) (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Rates and fares.—Maximum and minimum rates and fares and the classification in force on the North Western (State) railway from time to time to be in force on the British section.

NOTE.—Government of India in letter No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods which is in force on the Native State section, being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western (State) railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1891	2,31,401	...	...	...	5,356	—5,356	...	...	
1892	16,31,818	33,206	—1,994	...	59,649	—61,598	29	105·87	The figures of capital outlay in 1900 include the outlay on the Hyderabad-Rahoki Section. The gain to the State in 1901 was due to the completion of the line which was previously only partially open.
1893	16,61,091	1,30,817	16,471	0·99	65,767	—49,296	43	87·41	
1894	17,27,619	1,45,222	36,062	2·08	68,940	—32,878	47	75·17	
1895	17,74,095	1,68,139	46,609	2·63	71,080	—24,471	55	72·28	
1896	18,00,799	1,87,503	64,376	3·57	71,420	—7,044	61	65·67	
1897	18,37,796	2,05,182	59,413	3·23	73,552	—14,139	67	71·04	
1898	20,19,772	2,22,647	70,159	3·47	77,553	—7,394	73	68·49	
1899	33,48,918	2,25,242	88,463	2·64	1,07,380	—18,917	74	60·73	
1900	41,71,400	1,93,211	65,933	1·10	1,78,984	—1,13,051	65	65·98	
1901	38,81,861	4,24,307	1,73,567	4·47	1,52,429	+21,138	66	59·09	
1902	40,45,972	5,04,008	2,18,814	5·41	1,59,771	+59,043	78	56·59	
1903	40,45,338	5,84,094	2,62,379	6·49	1,60,179	+1,02,200	91	55·08	
1904	39,58,081	6,48,728	3,45,006	8·72	1,54,846	+1,90,160	101	46·82	

Number $\frac{\text{Main head 20}}{\text{Sub-head (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM.**

Lines comprising system.—The Rohilkund and Kumaon railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(a) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)	53·92	148·00	201·92
(b) Lucknow-Bareilly (State) railway (3′ 3⅜″ gauge)	237·04	...	237·04
(c) Powayan Light railway (2′ 6″ gauge)	39·50	...	39·50
Total	330·46	148·00	478·46

Running powers—

Home line over Foreign line—

	Miles.
Bhojeepura to Bareilly, Lucknow-Bareilly (State) railway, for passenger and goods trains	12·00

Foreign line over home line—

Bengal and North-Western, Daliganj to Aishbagh, for passenger and goods trains	3·40

20 (a) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.	Remarks.
			Miles.	Miles.		Miles.	
Bhoojeepura to Kathgodam	1882	12-10-84	53·92	53·92	1884 to 1904	54	
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—							
Bareilly to Soron	3-7-03	Probable date 1-5-06	56·00				Work on the Ramnagar and Kashipur extensions has not yet commenced.
Moradabad to Ramnagar		...	47·00				
Lalkua to Kashipur		...	45·00				
TOTAL LINES UNDER CONSTRUCTION	...	...	...	148·00			
GRAND TOTAL	...	...	...	201·92			

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. steel rails laid on sál, asna and deodar sleepers.

Ballast.—The ballast consists of broken brick, shingle and kunkur.

Fencing.—The line is unfenced except at stations and for about 21 miles between Haldwani and Kichha.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 70.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 96.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

20 (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—

The Rohilkund and Kumaon and Lucknow-Bareilly (State) railways are worked under the following contracts :—

Contracts of—12th October 1882.—Rohilkund and Kumaon Railway Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly (State) railway and the Company's line as one system. (Principal contract.)

31st December 1892.—Relating to advances of capital by Government.

5th February 1901.—Contract modifying the terms of the previous contracts.

24th April 1903.—Contract as to rate of exchange for purposes of contracts of 12th October 1882 and 8th September 1890.

16th July 1904.—Contract for construction of new branches and taking over a branch from Kasganj to Soron and other matters supplemental to contracts of 1882, 1890, 1901 and 1903.

The general conditions of the contracts are as follows :—

Government aid.—Company's section.—Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opening, which ceased on 31st December 1894. Land was provided free, subject to the condition that the Company pays on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section.—The Company to raise £160,000 capital by debentures which Government guarantee as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 96,000. Land was also provided free of charge.

Note.—All sums to be advanced by Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum under agreement dated the 5th February 1901.

Terms of contract.—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

Currency of contracts.—

(1) *Rohilkund and Kumaon railway contract.*—Government may terminate the contract at the end of the 30th year (*i.e.*, on the 31st December 1912) or the 50th year (*i.e.*, on the 31st December 1932) by giving 12 months' notice. If the contract terminates by such notice or by efflux of time, Government have to pay 25 times the average net earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. Government may also determine the contract at any time on six months' notice, if the Company fails to observe its obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove its property within nine months from the termination of the contract, otherwise it becomes the property of the Government.

(2) *Lucknow-Bareilly (State) railway.*—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year by giving twelve months' notice. In the event, however, of the original contract dated the 12th October 1882 terminating by efflux of time or under notice of purchase or notice of determination, this contract *ipso facto* also terminates at the same time. Government may also terminate the contract if the Company fails to observe its obligations after six months' notice. On determination of the contract, Government resume possession of the State railway on payment to the Company of the amount of the capital received or take over its liabilities with respect to such capital.

Power of Company to surrender contract.—Nil.

Terms of working.—Company's section.—During the period that the Government are liable to pay interest, after deducting working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) the surplus profits, after repayment of the guaranteed interest, go to the Company. Subsequently, half the surplus profits, after 5 per cent. for the year (within a limit of £5,000 for each half-year) has been appropriated to the Company, are to be applied in repayment to Government of arrears of guaranteed interest and interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897, Government are to receive half the surplus profits in excess of 6 per cent.

Note.—It has been agreed that, in calculating the surplus profits for division, sums received by the Company as its share of the surplus profits of the Lucknow-Bareilly railway shall not be taken into account.

Lucknow-Bareilly section.—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision) are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied : (*i*) in meeting payment of interest on the debentures, and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; (*ii*) in payment to Government of interest at 4 per cent. on their capital in the undertaking; (*iii*) the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

20 (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Any insufficiency of the profits to meet the charges under (*i*) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I: Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Table II: Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1884	19,40,266	36,543	1,734	0·09	...	1,734	0·09	51	95·16	The increase in the Capital outlay in 1904 is due to the inclusion of Rs. 17,15,960, outlay on the Bareilly-Soron extension under construction.
1885	21,71,124	2,35,572	40,153	1·85	40,000	80,153	3·69	68	64·40	
1886	22,52,962	3,00,191	88,832	3·72	40,000	1,28,832	5·50	86	58·75	
1887	22,91,619	3,19,274	76,800	3·35	40,000	1,16,800	5·10	92	63·42	
1888	23,40,100	3,34,092	1,02,120	4·36	40,000	1,42,120	6·07	96	57·46	
1889	23,96,624	3,72,270	1,20,135	5·01	40,000	1,60,135	6·69	107	56·98	
1890	20,37,223	3,14,834	1,11,003	5·45	40,000	1,51,003	7·41	90	52·04	
1891	20,49,458	3,85,084	1,33,440	6·52	20,000	1,53,440	7·49	112	58·22	
1892	20,58,575	5,20,567	1,57,780	6·82	40,000	1,97,780	9·61	127	54·17	
1893	20,62,280	4,25,909	1,43,180	6·17	40,000	1,83,180	8·80	124	56·78	
1894	20,80,440	4,59,315	1,75,191	7·16	40,000	2,15,191	10·34	134	52·91	
1895	20,78,251	4,04,504	1,52,973	7·36	...	1,52,973	7·36	118	62·18	
1896	20,79,863	4,26,905	1,54,595	7·43	...	1,54,595	7·43	125	63·79	
1897	21,20,428	4,23,720	1,73,184	8·17	...	1,73,184	8·17	124	59·33	
1898	21,42,552	4,62,308	2,21,899	10·36	...	2,21,899	10·36	135	52·24	
1899	21,48,313	4,75,623	2,34,020	10·89	...	2,34,020	10·89	136	49·74	
1900	21,53,125	4,57,572	2,34,048	10·59	...	2,28,048	10·59	156	48·64	
1901	22,09,423	3,84,314	2,09,896	9·50	...	2,09,896	9·50	112	45·38	
1902	23,35,911	4,10,026	2,18,317	9·37	...	2,18,317	9·34	146	46·83	
1903	25,89,790	4,13,147	2,30,405	8·51	...	2,30,405	8·51	121	46·65	
1904	43,55,575	4,18,787	2,24,403	5·15	...	2,24,403	5·15	122	46·41	

20 (*b*) Lucknow-Bareilly (State) railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
					1884	36
Main line—					1885	36
Lucknow to Sitapur	8-10-84	15-12-86	55·00		1886	91
Sitapur to Lakhimpur		15-4-87	28·50		1887	141
Lakhimpur to Gola Gokaran Nath		15-12-87	21·50		1888	141
Gola Gokaran Nath to Pilibhit	27-12-89	1-4-91	57·55		1889	141
Pilibhit to Bhoojeepura	Bareilly to mile 4·63 on 17-3-82	15-11-84	24·00		1890	141
Bhoojeepura to Bareilly	Mile 4·62 to Pilibhit, 24-2-83.	12-10-84	12·00		1891	198
					1892	198
Total Main line	...	...	...	198·55	1893	222
					1894	231
Branches—					1895	231
Bareilly grain siding	24-3-92	1-4-94	1·75		1896	231
Dudhwa branch—					1897	231
Mailani to Sarda	Mailani to Dudhwa, 3-12-90; Dudhwa to Sonaripur. 2-11-93.	1-1-93	15·00		1898	231
Sarda to Sohela		10-3-93	8·50		1899	231
Sohela to Sonaripur		18-3-94	7·37		1900	231
Dudhwa to Chandan Choki	12-4-01	4-4-03	5·87		1901	231
Total Branches	...	...	...	38·49	1902	231
TOTAL OPEN MILEAGE	...	...	...	237·04	1903	232
					1904	237

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

20 (*b*) Lucknow-Bareilly (State) railway (3′ 3⅜″ gauge)—*concld.*

Details of construction:—

Permanent-way.—The permanent-way consists of 41½lb. steel rails (with the exception of the old Oudh and Rohilkhand railway 60lb. steel rails between Daliganj and Lucknow Junction), laid on sâl, asna and deodar sleepers.

Ballast.—The ballast consists of broken bricks, kunkur and shingle.

Fencing.—The line is unfenced except at stations and for 7 miles between Lucknow Junction and Mariaon.

Curves.—The only curve with a radius of less than 1,000 feet occurs between Lucknow Junction and Lucknow City stations and is 0·63 mile in length.

Gradient.—The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts—

See under Rohilkund and Kumaon railway proper, pages 204 and 205.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Bareilly-Pilibhit, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.	Lucknow-Sitapur-Seramau, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.	Lucknow-Bareilly, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1883 . .	4,84,915	...	...	...	11,192	...	−11,192	...	...	...	...	...	...
1884 . .	13,43,699	10,239	839	0·06	36,572	...	−35,733	32	91·81	...	...	...	...
1885 . .	25,45,567	82,827	17,243	0·68	53,247	...	−36,004	44	88·79	...	...	...	...
1886 . .	42,16,146	1,15,296	28,729	0·68	1,48,570	...	−1,19,841	53	77·46	45	76·29	...	...
1887 . .	53,24,221	2,92,470	67,924	1·30	1,85,046	...	−1,17,122	52	71·47	46	73·49	...	...
1888 . .	52,82,870	3,52,827	99,031	1·87	2,06,503	...	−1,04,472	50	70·31	47	70·81	...	...
1889 . .	54,59,585	4,28,731	1,47,868	2·70	2,16,189	...	−68,321	59	66·45	59	65·10	...	...
1890 . .	65,33,324	4,56,738	1,32,338	2·02	2,30,699	...	−98,361	64	66·08	62	72·78	...	...
1891 . .	79,17,846	4,95,068	1,73,011	2·19	2,72,065	...	−99,054	...	...	...	...	56	63·05
1892 . .	81,66,804	6,32,836	2,74,601	3·36	3,07,651	11,501	−44,551	...	...	...	...	66	59·72
1893 . .	83,89,362	7,28,878	2,73,541	3·26	3,26,770	2,135	−55,364	...	...	...	...	67	62·29
1894 . .	85,93,058	9,72,269	4,48,318	5·22	3,45,323	79,310	+ 23,585	...	...	...	...	87	59·25
1895 . .	87,22,466	8,25,934	3,13,116	3·59	3,56,596	15,834	−59,314	...	...	...	...	74	61·90
1896 . .	89,63,020	8,27,599	3,02,071	3·37	3,48,885	13,415	−60,229	...	...	...	...	75	63·32
1897 . .	93,02,715	8,27,371	3,35,776	3·61	3,61,550	26,980	−52,754	...	...	...	...	69	50·42
1898 . .	94,90,476	10,34,068	5,00,200	5·27	3,66,852	66,721	+68,627	...	...	...	...	94	51·62
1899 . .	94,97,485	12,72,160	6,33,355	6·63	3,65,537	76,332	+ 1,91,486	...	...	...	...	114	50·21
1900 . .	99,21,432	12,53,801	6,51,957	6·57	3,73,097	1,47,611	+ 1,31,249	...	...	...	...	107	48·72
1901 . .	1,01,88,243	13,72,520	7,58,124	7·44	3,91,796	99,195	+ 2,67,133	...	...	...	...	123	44·76
1902 . .	1,12,96,019	14,53,329	7,69,568	6·81	4,23,528	71,666	+ 2,74,374	...	...	...	...	132	47·05
1903 . .	1,15,01,911	14,03,266	7,48,689	6·51	4,53,935	52,573	+ 2,42,291	...	...	...	...	126	46·65
1904 . .	1,17,14,505	14,96,120	7,97,671	6 81	4,53,923	54,487	+ 2,89,256	...	...	...	...	133	46·68

20 (*c*) Powayan Light railway (2′ 6″ gauge)—

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Shahjahanpur to Powayan	Jany. 1889	17-6-90	17·00		1890	17
Powayan to Khotar		19-5-91	14·00		1891	31
Khotar to Mailani	Feby. 1894	22-12-94	8·50		1892	31
					1893	31
TOTAL	...	...	...	39·50	1894 to 1904	40

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. ROHILKUND AND KUMAON RAILWAY SYSTEM—*concld.*

20 (*c*) Powayan Light railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 25 lb. to the yard, laid on sâl sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Powayan Light railway is worked under the following contracts:—

Contract of—1st July 1901 (between the Secretary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows:—

Government aid.—Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent. of the gross earnings until the line is fully equipped and thereafter, the same percentage as that at which the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs. 200 and subject to a maximum charge of Rs. 20 per mile in each half-year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Bareilly State railway.

Statistics of working.—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	8,41,088	66,862	20,059	2·39	33	70·00
1902	8,93,456	75,675	22,521	2·52	37	70·24
1903	8,94,619	71,815	28,482	3·18	35	60·34
1904	8,94,751	78,015	30,937	3·46	38	60·34

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. SOUTH INDIAN RAILWAY SYSTEM—

Lines comprising system.—The South Indian railway system is made up of—

	Open line. Miles.	Under construction. Miles.	Total. Miles.
(*a*) South Indian railway (3′ 3⅜″ gauge)	1,123·13	20·83	1,143·96
(*b*) Karaikkal-Peralam railway (3′ 3⅜″ gauge)	14·65	...	14·65
(*c*) Pondicherry railway (3′ 3⅜″ gauge)	7·85	...	7·85
(*d*) Tanjore District Board railway (3′ 3⅜″ gauge)	99·46	5·53	104·99
(*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)	50·40	...	50·40
(*f*) Tinnevelly-Quilon (Travancore) (Native state section) (3′ 3⅜″ gauge)	57·98	...	57·98
Total	1,353·47	26·36	1,379·83

21 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—

The line from Negapatam to Erode was commenced in May 1859 by the late Great Southern India Railway Company and was completed on the 5′ 6″ gauge. It was converted to the 3′ 3⅜″ gauge in sections as follows:—Negapatam to Trichinopoly, June and July 1875; Trichinopoly to Karur, July 1879; Karur to Erode, December 1879. The line from Arkonam to Little Conjeeveram was commenced on the 11th March 1864 by the Indian Tramway Company under the subsidy system and was completed on the 3′ 6″ gauge. It was converted to 3′ 3⅜″ gauge in July 1878.

On the 1st January 1891, the South Indian railway was purchased by the Secretary of State and handed over, together with the Villupuram-Guntakal State railway, to a new Company called the "South Indian Railway Company, Limited," the whole now forming the South Indian railway.

The Pamban branch has been constructed with the object of placing the island of Rameswaram in communication with the South Indian railway system.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
MADRAS-TINNEVELLY BRIDGE SECTION—			Miles.	Miles.		Miles.
Main line—						
Madras (Beach Joint to Beach old)	1900	15-1-00	0·11		1861	48
Madras Beach old to Park (zero point)		1-1-79	1·82		1862	82
Madras (Park) to Tindivanam	25-2-73	1-9-76	76·05		1863	82
Tindivanam to Cuddalore old town		1-1-77	52·01		1864	82
Cuddalore old town to Porto Novo		1-7-77	17·15		1865	99
Porto Novo to Chidambaram		1-10-78	6·78			
Chidambaram to Coleroon	12-6-74	1-7-79	4·57		1866	144
Coleroon to Shiyali		1-1-78	6·06		1867	160
Shiyali to Mayavaram		1-7-77	12·24		1868	184
Mayavaram to Tanjore		15-2-77	43·76		1869	184
Tanjore to Trichinopoly Junction	May 1859	11-3-62	31·14		1870	184
Trichinopoly Junction to Madura	2-3-72	1-9-75	96·04			
Madura to Tinnevelly bridge		1-1-76	99·76		1871	184
Tuticorin to Foreshore	1899	7-8-99	0·41		1872	184
Total Main line	...	...	...	446·85	1873	184
Branches—					1874	184
Arkonam branch—					1875	280
Chingleput to Walajabad	Nov. 1879	1-8-80	13·66		1876	473
Walajabad to Little Conjeeveram		1-1-81	7·94		1877	508
Little Conjeeveram to Great Conjeeveram	11-3-64	1-8-65	2·00		1878	611
Great Conjeeveram to Arkonam		8-5-65	15·65		1879	631
			39·25		1880	645
					1881	653
Pondicherry branch—					1882	653
Villupuram to the Gingee river, inclusive of the bridge over the river	May 1879	15-12-79	16·47		1883	654
					1884	654
Nagore branch—					1885	654
Tanjore to Tirnvallur	May 1859	2-12-61	33·83			
Tiruvallur to Negapatam		15-7-61	14·38		1886	654
Negapatam to Nagore	11-11-98	1-12-99	4·67		1887	737
			52·83		1888	737
					1889	737
Pulliarpati Quarry branch—					1890	779
Tanjore to Pulliarpati quarry buffer end	1898	1-7-98	4·57		1891	901
					1892	1,042
Erode branch—					1893	1,042
Trichinopoly Junction to Fort		11-3-62	2·52		1894	1,042
Trichinopoly Fort to Karur	May 1859	3-12-66	44·65		1895	1,042
Karur to Kodumudi		1-7-67	16·70			
Kodumudi to Erode		1-1-68	23·54		1896	1,042
			87·41		1897	1,042
Pamban branch—					1898	1,013
Madura to Mandapam	21-4-99	1-8-02	89·50		1899	1,030
					1900	1,034
Tuticorin branch—						
Maniyachi to Tuticorin	2-3-72	1-1-76	18·18		1901	1,034
					1902	1,123
Wharf branch—					1903	1,123
Cuddalore old town to Wharf	1899	7-8-99	1·54		1904	1,123
Capper quarry branch—						
Junction with main line to Capper Quarry	1900	15-4-00	0·86			
Salt branch—						
Tuticorin to buffer end of Livingepuram	1899	12-11-99	2·39			
Total Branches	...	...	...	313·00		
TOTAL MADRAS-TUTICORIN SECTION	...	...	...	759·85		
VILLUPURAM-DHARMAVARAM SECTION—						
Main line—						
Villupuram to Tiruvannamalai	Nov. 1888	17-11-90	41·80			
Tiruvannamalai to Pakala		18-3-91	96·55			
Pakala to Vayalpad		1-1-92	46·69			
Vayalpad to Dharmavaram		1-3-92	94·14			
Total Main line	...	...	...	279·18		
Branch—						
Gudur branch—						
Pakala to Tirupati West	Nov. 1888	18-3-91	25·05			
Tirupati West to Gudur	15-11-83	15-9-87	59·05			
Total Branch	...	...	...	84·10		
TOTAL VILLUPURAM-DHARMAVARAM SECTION	...	...	...	363·28		
TOTAL OPEN MILEAGE, SOUTH INDIAN PROPER	...	...	...	1,123·13		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Pamban branch—						
Tiruppachetti to Sivagunga	21-4-99	...	9·00			
Mandapam to Rameswaram temple	16-9-04	...	10·12			
Tangachimadam to Port Ampthill		...	1·71			
Total Lines under construction	...	...	...	20·83		
GRAND TOTAL, SOUTH INDIAN PROPER	...	...	...	1,143·96		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$ **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The main line from the Beach station at Madras to Tinnevelly bridge was laid originally with 40 lb. iron rails on creosoted wooden sleepers and is now relaid with 50 lb. bull headed steel rails, mostly 24 or 30 feet long, on cast iron pot sleepers 11 to a 30 feet rail. On the rest of the line including all branches and the Villupuram-Dharmavaram section, the total length of which is 676·69 miles, there are rails, 68 lb. double headed iron, on cast iron pots for 98·08 miles and on wooden sleepers for 9·41 miles, 56 lb. flat footed steel on longitudinal timbers for 0·65 mile; 52 lb. bull headed steel on cast iron pots for 20·18 miles; 50 lb. bull headed steel on cast iron pots for 145·22 miles; 41½ lb. flat footed steel, on wooden sleepers for 30·79 miles, on cast iron pots for 3·33 miles, on steel transverse sleepers for 312·72 miles and on Denham Olpherts' cast iron sleepers for 34·75 miles; and 40·3 lb. flat footed iron on wooden sleepers for 12·92 miles, on cast iron pot for 0·40 mile, and on steel transverse sleepers for 16·09 miles. The 68 lb. rails are 21 and 18 feet in length, all other rails are 24,21 and 18 feet; there are also 52 and 50 lb. rails 30 and 27 feet in length. Sleepers are laid 11, 10, 9, 8 and 7 to 30, 27, 24, 21 and 18 feet rails, respectively.

Ballast.—The line is ballasted throughout, partly with broken stones and partly with laterite and gravel interspersed.

Fencing.—The line is fenced with aloe and wire (with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and the Pamban branch which are fenced only at stations). In some places fence walls have been erected. As aloe is decaying or being removed, wire fence is being gradually introduced. The first 20 miles from Madras have been fenced with wire. The different descriptions of fencing are so scattered that they are too numerous to be detailed.

Curves.—The sharpest curve is of 500 feet radius, 0·13 mile long, between miles N. 268—9 and N. 269—0.

Gradients.—The ruling gradient is 1 in 200 except on the length between Madras Beach and Fort and on the Villupuram-Dharmavaram, Pakala-Gudur, Trichinopoly-Madura, and Karur-Erode sections, where it is 1 in 100.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.

27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

The general conditions of the contracts are as follows:—

Terms of contract.—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.* The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock, which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required are provided either by the Secretary of State, or raised by the Company under guarantee. Subject to the provision of the contract, all moneys paid by the Company become the absolute property of the Secretary of State.

*Company's stock at date of purchase	£ 3,208,280
Premium	989,277
	4,197,557

Currency of contract.—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it, by giving six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract, Government are to take possession of the railway and all its appliances, repaying at par to the Company its capital of £1,000,000 and any further capital raised by it and paid to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts to be applied in payment to Government of the equivalent in rupees of interest at 3 per cent. on £1,000,000, the Company's capital, at 4½ per cent. on £425,000, the irredeemable debenture stock of the old Company and at 3½ per cent. on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamban branch and 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 21}{\text{Sub-heads } (a) \text{ to } (f)}$. **SOUTH INDIAN RAILWAY SYSTEM**—*contd.*

21 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

TABLE I [INCLUDING THE TINNEVELLY-QUILON (TRAVANCORE) RAILWAY (BRITISH AND NATIVE STATE SECTIONS).]

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879.	4,41,96,588	33,62,067	10,63,253	2·40	20,95,206	...	—10,31,953
1880.	4,46,77,075	35,59,593	9,30,017	2·08	21,28,643	...	—11,98,626
1881.	4,52,22,730	37,55,688	12,37,726	2·73	21,30,568	...	—8,92,842
1882.	4,53,69,290	37,58,714	14,02,328	3·09	21,40,871	...	—7,38,543
1883.	4,53,97,614	38,69,668	13,22,334	2·91	21,46,579	...	—8,24,245
1884.	4,67,51,662	41,89,049	14,92,491	3·19	25,40,471	...	—10,47,980
1885.	4,93,74,900	45,60,126	15,81,714	3·20	27,02,145	...	—11,20,431
1886.	5,15,40,172	49,20,176	14,75,914	2·86	29,80,496	...	—15,01,582
1887.	5,40,64,399	51,79,324	15,86,729	2·89	31,25,720	...	—15,38,991
1888.	5,57,91,978	56,58,683	16,31,692	2·92	33,80,057	...	—17,48,365
1889.	6,25,01,638	59,39,978	17,63,111	2·82	35,29,935	...	—17,66,824
1890.	7,27,15,494	64,25,510	26,67,305	3·66	35,19,564	1,43,341	—9,95,600
1891.	7,72,11,805	70,36,756	23,58,724	3·05	35,89,726	...	—12,31,012
1892.	7,82,83,761	77,14,996	27,77,005	3·55	39,51,093	...	—11,74,088
1893.	7,63,31,043	80,92,415	30,34,332	3·98	38,58,152	...	—8,23,820
1894.	7,64,13,362	80,46,559	32,83,865	4·30	42,81,812	1,06,449	—11,04,396
1895.	7,68,38,604	89,14,947	38,96,987	5·07	42,77,578	2,55,271	—6,35,862
1896.	7,67,63,925	89,45,581	40,27,489	5·25	40,60,677	2,51,567	—2,81,755
1897.	7,66,40,858	91,81,409	42,96,757	5·61	38,76,142	3,25,390	+ 95,225
1898.	7,45,21,873	84,67,581	38,35,527	5·15	37,49,521	3,06,473	—2,20,467
1899.	7,53,82,623	84,74,462	39,83,540	5·28	36,39,891	2,45,608	+ 98,041
1900.	7,69,70,119	89,01,825	43,97,986	5·71	36,77,879	3,68,408	+3,51,629
1901.	8,23,78,918	1,01,44,657	54,15,176	6·57	37,23,736	4,39,540	+12,31,900
1902.	8,49,97,226	1,05,08,282	57,14,254	6·72	39,64,367	4,80,185	+12,69,702
1903.	8,69,72,143	1,23,82,517	73,77,644	8·48	40,28,063	6,96,450	+26,53,126
1904.	10,01,55,636	1,28,18,085	71,16,981	7·11	45,90,992	7,05,488	+18,20,501

TABLE II (INCLUDING THE PONDICHERRY RAILWAY).

Calendar year.	Earnings per mile per week	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.			Rs.	
1861.	77	47·45	1887.	148	68·20
1862.	61	44·43	1888.	159	68·96
1863.	74	44·60	1889.	167	70·11
1864.	69	57·55	1890.	181	57·50
1865.	79	49·53	1891.	154	65·47
1866.	106	49·28	1892.	137	63·01
1867.	86	49·66	1893.	149	61·25
1868.	90	48·64	1894.	148	58·99
1869.	84	64·44	1895.	165	56·13
1870.	84	62·10	1896.	165	54·89
1871.	84	55·61	1897.	170	53·01
1872.	87	56·87	1898.	157	54·50
1873.	120	49·99	1899.	159	52·41
1874.	101	60·81	1900.	166	50·27
1875.	96	48·16	1901.	188	46·17
1876.	90	53·27	1902.	189	45·60
1877.	107	50·88	1903.	203	39·99
1878.	102	66·65	1904.	214	44·35
1879.	105	68·38			
1880.	106	73·67			
1881.	109	67·04			
1882.	109	63·69			
1883.	112	65·83			
1884.	122	64·18			
1885.	132	65·12			
1886.	143	69·78			

21 (*b*) Karaikkal-Peralam railway (3′ 3⅜″ gauge)—

The line is partly in British and partly in French territories and was constructed by the agency of the South Indian Railway Company with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Karaikkal to Peralam	July 1895	14-3-98	14·65	14·65

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat footed steel rails in lengths of 30, 27, 24, 21, and 18 feet laid, respectively, on 11, 10, 9, 8 and 7 wooden and steel transverse sleepers.

Ballast.—The line is ballasted with laterite.

Fencing.—The line is fenced only at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract.—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working.—The line is worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, plus 5 per cent. of the gross receipts of the line for the use of the main line rolling-stock and Rs. 1,500 per annum for interest on the main line Revenue stores and Stores and workshop buildings and machinery. If at any time the Company can show that the working of the railway involves an actual loss on the percentage terms, the Government of the French Settlements in India have to make good the loss.

Rates and fares.—Same as on the South Indian railway system.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 28.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (*b*) Karaikkal-Peralam railway (5′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	4,759	...	...	...	...	...
1896	59,009	...	...	...	...	...
1897	5,93,062	...	...	...	...	...
1898	7,21,665	19,738	7,855	1·09	27	60·19
1899	7,25,346	27,685	9,037	1·25	37	67·36
1900	7,29,715	24,608	9,478	1·30	32	61·48
1901	7,25,786	30,450	13,314	1·84	40	56·28
1902	7,25,786	32,736	14,619	2·02	43	55·34
1903	7,25,786	38,033	19,964	2·74	51	48·98
1904	7,25,786	36,945	—29,432	...	48	179·66

21 (*c*) Pondicherry railway (3′ 3⅜″ gauge)—

The line is in French territory and was constructed by the Pondicherry Railway Company under the supervision of the South Indian railway with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Left bank of Gingee river to Pondicherry	June 1878	15-12-79	7·85	7·85

Details of construction—

Permanent-way.—0·34 mile is laid with 50 lb. bull headed steel rails on cast iron pot sleepers, and 7·51 miles with 41¼ lb. flat footed steel rails on wooden sleepers. The rails in lengths of 24, 21 and 18 feet are laid on 9, 8 and 7 sleepers, respectively.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced with aloe and wire fencing.

Curves.—The sharpest curve is of 495 feet radius, 0·75 mile long, on the wharf line.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

The general conditions of the contract are as follows :—

Currency of contract.—The contract will be terminable by either party, on giving 6 months' notice expiring on the 31st December in any year.

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway.

Rates and fares.—Same as on the South Indian railway.

Statistics of working—

Calendar year.	Table I. Capital outlay.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.			
1879 to 1889	Information not available.					
1890	5,68,543	...	...	...	Included with the South Indian railway proper.	
1891	5,68,543	20,106	20,107	3·54		
1892	5,68,543	15,341	15,341	2·70		
1893	5,68,543	18,014	18,014	3·17		
1894	5,68,543	27,958	18,425	3·24		
1895	5,68,543	50,328	22,711	3·99		
1896	5,68,543	39,681	17,776	3·13		
1897	5,68,543	36,892	17,169	3·02		
1898	5,68,543	31,830	14,394	2·53		
1899	5,68,543	45,905	21,627	3·80		
1900	5,68,543	59,382	23,193	4·08		
1901	5,68,543	60,174	32,936	5·69		
1902	5,68,543	70,478	37,960	6·68		
1903	5,68,543	73,416	44,258	7·78		
1904	5,68,543	60,119	33,662	5·92		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (*d*) Tanjore District Board railway ($3' 3\frac{3}{8}''$ gauge)—

This railway was constructed by the agency of the South Indian Railway Company, and the money for the railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways, for which Government are unable to find the money immediately, either by the District Board itself raising the capital when the cess is sufficient for this purpose, or by giving a guarantee to a company.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mayavaram to Tiruvallur	10-8-91	2-4-94	54·08		1894	54
Tiruvallur to Mutupet	June 1890				1895	54
Mutupet to Pattukkottai	15-11-00	20-10-02	17·03		1896	54
Pattukkottai to Arantangi	15-11-00	31-12-03	28·35		1897	54
Total open mileage	...	...	...	99·46	1898	54
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—					1899	54
Thambikkottai salt siding	15-11-00	...	0·63		1900	54
Adirampatnam salt siding		...	1·00		1901	54
Arantangi quarry branch		31-1-05	3·90		1902	71
Total Lines under construction	...	...	...	5·53	1903	99
GRAND TOTAL	...	...	...	104·99	1904	99

Details of construction—

Permanent-way.—57·37 miles are laid with 41¼ lb. flat footed steel rails, mostly 30 feet long, on sal, pyinkado, west-coast teak and jarrah sleepers, 11 to a rail; and the remaining length with 40·3 lb. second class flat footed iron rails on wooden sleepers in lengths of 24, 21 and 18 feet.

Ballast.—Mayavaram-Mutupet section is ballasted with laterite and the Mutupet Arantangi section is being ballasted with laterite over sand.

Fencing.—The line is fenced only at stations.

Curves.—The sharpest curve is of 11·46 feet radius. There are two such curves the total length of which is 0·29 mile.

Gradients.—The ruling gradient is 1 in 200 except between Adirampatnam and Pattukkottai where it is 1 in 160.

Terms of contract—

The railway is worked under the following contract:—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—Land was provided free of cost.

Terms of contract—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900, the Tanjore District Board took over the Government section and became sole owners, the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line is being carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract.—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued, and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances, this condition will not be enforced up to 31st December 1920 (Government of India No. 303 R. C., dated 5th March 1898).

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) *plus* 5 per cent. of the gross receipts of the line for use of rolling-stock, and all other charges properly debitable to revenue.

Rates and fares.—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (*d*) Tanjore District Board railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1890	61,509	...	...	...	1,230	−1,230	...	...
1891	4,82,149	...	...	...	10,873	−10,873	...	...
1892	13,84,423	...	...	...	37,331	−37,331	...	...
1893	21,62,957	...	...	...	70,947	−70,947	...	...
1894	23,79,123	1,63,460	62,912	2·65	1,00,701	−37,759	103	61·50
1895	24,47,438	2,42,024	93,669	3·83	95,700	−2,031	86	61·30
1896	24,49,680	2,47,772	99,361	4·06	97,861	+1,500	88	59·90
1897	24,91,851	2,66,081	1,11,496	4·47	99,159	+12,337	95	58·10
1898	24,94,905	2,46,199	77,627	3·11	99,845	−22,218	88	68·47
1899	24,97,355	2,42,016	96,793	3·88	99,845	−3,017	86	60·01
1900	26,50,776	2,32,280	97,782	3·69	1,02,734	−4,952	83	32·02
1901	32,17,511	2,90,037	1,35,765	4·22	1,38,831	−3,076	103	53·29
1902	38,18,202	3,08,879	1,46,764	3·84	1,63,157	−16,393	103	52·48
1903	45,70,190	3,90,747	2,09,167	4·58	1,97,476	+11,691	106	46·47
1904	46,32,763	5,24,490	2,61,364	5·64	2,25,868	+35,496	101	50·17

21. (*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Tinnevelly bridge to Kallidaikurichi	21-4-99	1-6-02	19·05		1902	19
Kallidaikurichi to the British frontier near Shencottah	21-4-99	1-8-03	30·45		1903	49
Portion near the frontier of the Travancore State	21-4-99	26-11-04	0·90		1904	50
Total	...	...	...	50·40		

Details of construction—

Permanent-way.—The line is laid with 50 lb. bull-headed steel rails, 30 feet long, with a small percentage of 24 and 27 feet rails, on cast iron pot sleepers, at the rate of 11 to a 30 feet rail; 0·12 mile in the Tinnevelly station yard is laid with 40 lb. flat-footed iron rails on wooden sleepers

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced with wire at stations, and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Travancore branch is worked under the following contract:—

Contract of—27th June 1901 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—Government guarantee interest on the debentures to be raised by the South Indian Railway Company for the construction of the line.

Currency of contract.—The contract will remain in force until the principal contract for working the undertaking shall terminate.

Terms of working.—The branch is to be worked for the same percentage of working expenses to gross earnings as obtains on the undertaking subject to maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore, the latter has under-written the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency being met by the Native State.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads } (a) \text{ to } (f)}$. **SOUTH INDIAN RAILWAY SYSTEM—*concld.***

21 (*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I.	Table II. (Including the Native State Section.) Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
1902	Included with the South Indian railway proper	81	44·34
1903		101	41·18
1904		85	51·04

21 (*f*) Tinnevelly-Quilon (Travancore) Native state section (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Portion in the Travancore state	15-5-99	1-8-03	0·43			
Quilon to Ponalur	21-4-99	1-6-04	28·28		1903	1
Ponalur to the British frontier near Shencottah		26-11-04	29·27			
Total	...	...	...	57·98	1904	58

Details of construction—

Permanent-way—The line is laid with 50 lb. bull-headed steel rails, 30 feet long, with a small percentage of 24 and 27 feet rails, on cast iron pot sleepers at the rate of 11 to a 30 feet rail, except for a length of 23·48 miles, between Ponalur and Shencottah, where there are wooden sleepers, consisting of jarrah, irul and teak, at the rate of 12 under each 30 feet rail.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced with wire only at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 477 feet radius and 0·23 mile long between Ponalur and Shencottah.

Gradients.—The ruling gradient between Quilon and Ponalur is 1 in 100 and between Ponalur and Shencottah 1 in 50.

Terms of contracts—

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) British section.

Statistics of working—

Table I, included with the South Indian railway proper and table II, with the British Section.

Number $\frac{\text{Main head 22}}{\text{Sub-heads } (a) \text{ to } (j)}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—**

Lines comprising system.—The Southern Mahratta railway system is made up of—

	Open line.	Under construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Southern Mahratta railway (3′ 3⅜″ gauge)	1,042·04	...	1,042·04
(*b*) Birur-Shimoga railway (3′ 3⅜″ gauge)	37·92	...	37·92
(*c*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)	119·50	...	119·50
(*d*) Hindupur (Yesvantpur-Mysore frontier) railway (3′ 3⅜″ gauge)	51·35	...	51·35
(*e*) Kolhapur railway (3′ 3⅜″ gauge)	29·27	...	29·27
(*f*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)	15·80	...	15·80
(*g*) Mysore section (Southern Mahratta) (3′ 3⅜″ gauge)	296·22	...	296·22
(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)	51·10	...	51·10
(*i*) *Bellary-Rayadrug railway (3′ 3⅜″ gauge).*	...	33·00	33·00
(*j*) *Hospet-Kottur railway (3′ 3⅜″ gauge)*	...	44·10	44·10
Total	1,643·20	77·10	1,720·30

Running powers—

Home line over Foreign line —

Tadepalli to Bezwada, Madras (North-East line) railway, for passenger and goods trains . . . . . 2·97

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main-head 22}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22. (*a*) Southern Mahratta railway proper (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Main line—							
Frontier to Castle Rock	...	3-2-88	3·63		1884	214	
Castle Rock to Deuli	...	15-6-87	2·75		1885	316	
Deuli to Dharwar	...	24-1-87	56·00		1886	477	
Dharwar to Hospet	Bellary to Hubli, Nov. 1881	1-7-85	101·25		1887	849	
					1888	854	
					1889	979	
Hospet to Bellary		24-3-84	40·51		1890	1,043	The line from Bellary to Guntakal was originally a branch of the Madras railway (5′ 6″ gauge) (the dates of opening being: Guntakal to Virapur, 16th January 1871; Virapur to Bellary, 1st March 1871), but was subsequently made over to the Southern Mahratta Railway Company on 1st February 1887 and converted from 5′ 6″ to 3′ 3⅜″ gauge on the 16th May 1887.
Bellary to Guntakal	...	16-5-87	29·99		1891	1,044	
Guntakal to Nandyal		11-7-87	90·25		1892	1,044	
					1893	1,044	
Nandyal to Cumbum	26-9-83	15-6-90	63·18		1894	1,042	
					1895	1,042	
Cumbum to Tadepalli		3-10-89	122·41		1896	1,042	
					1897	1,042	
Total Main line	...	...	...	509·97	1898	1,042	
					1899	1,042	
					1900	1,042	
					1901	1,042	
					1902	1,042	
					1903	1,042	
					1904	1,042	
Branches—							
Harihar branch—							
Hubli to Harihar (temporary station)	...	18-10-86	61·00	...			
Temporary station to permanent station	...	21-2-89					
Bijapur branch—							
Gadag to Hotgi	April 1879	1-8-84	173·08	...			
Poona branch—							
Londa to Belgaum	...	21-3-87	38·00	...			
Belgaum to Miraj	29-11-83	22-12-87	85·01	...			
Miraj to Koregaon		2-5-87	76·00	...			
Koregaon to Ghorpuri		18-11-86	83·07	...			
Ghorpuri to Poona		4-10-90	0·91	...			
				...			
			277·99				
Total Branches	...	...	...	532·07			
GRAND TOTAL	...	...	...	1,042·04			

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails except between Gadag and Hotgi where they are of steel and iron mixed. The length between Portuguese Frontier and Castle Rock is laid with 62 lb. flat-footed steel rails. The length of the rails is mostly 23 feet 9½ inches. The main line is laid partly on wooden sleepers, teak and jamba, and partly on steel sleepers of the trough pattern. The Harihar branch is laid on teak and steel trough sleepers. The Bijapur branch mostly on steel trough sleepers and a portion is laid with jamba. The Poona branch is laid on teak, jamba and steel trough sleepers. The number of sleepers per rail is at a minimum of 8 sleepers per rail of 23 feet 9½ inches. The portion of the line between Castle Rock and Hubli has been relaid with 50 lb. flat-footed steel rails, 30 feet long, on wooden sleepers, 11 to a rail. The old rails were 41½ lb. and were laid on wooden sleepers.

Ballast.—The line is ballasted throughout. The main line and Poona branch with stone, gravel and sand, the Harihar branch with stone and the Bijapur branch with stone and gravel.

Fencing.—The line is only partially fenced. The main line and the Bijapur and Poona branches with wire, aloe or cactus and stone wall and the Harihar branch with aloe or cactus and wire fencing.

Curves.—The sharpest curve on the main line is of 603 feet radius; such curves occur between miles 34 and 35 and their lengths vary from 470 to 1,232 feet. The sharpest curve on the Poona branch is of 600 feet radius, such curves occur between miles 255 and 266 and their total lengths amount to 1,786 feet.

Gradients.—The ruling gradient is 1 in 100, except on the Ghats, between miles 0 and 3 on the main line, where the gradient is 1 in 40.

Terms of contracts—

The Southern Mahratta railway is worked under the following contracts:—

Contract of—1st June 1882.—Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$ **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*a*) Southern Mahratta railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

The general conditions of the contracts are as follows :—

Government aid.—Interest in sterling on share capital at 3½ per cent. is guaranteed and an additional ½ per cent. until 31st December 1890.

Terms of contract.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contracts.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (*i. e.*, on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the company fails to observe its obligations, or the line is worked at a loss. Upon determination of the contract by efflux of time or by notice Government have to repay to the Company the amount of the par value of the share capital paid to Government.

Power of Company to surrender contracts.—The Company may determine the contracts on the 30th June in any year, by giving one year's previous notice.

Terms of working.—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor work' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts belonged to Government unless one-fourth part of the same exceeded the extra guarantee of ½ per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890, three-fourths of the net receipts are paid to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1884	2,77,07,721	2,13,059	—18,131	...	14,77,196	...	—14,95,327	50	108·51
1885	3,63,00,076	8,66,226	1,40,238	0·38	19,81,340	...	—18,41,102	63	83·80
1886	6,15,07,620	16,34,918	4,88,392	0·79	26,43,220	...	—21,54,828	92	69·83
1887	7,87,73,165	30,32,417	10,08,624	1·27	34,64,086	...	—24,60,462	87	66·01
1888	8,68,81,248	38,38,616	8,65,493	1·01	31,89,505	...	—23,04,012	86	75·70
1889	9,18,52,133	40,31,604	9,61,618	1·04	32,91,520	41,700	—23,71,602	88	76·15
1890	9,32,85,016	44,71,095	9,14,664	0·98	31,39,444	30,036	—22,54,816	85	78·19
1891	9,42,66,041	47,60,857	16,29,919	1·73	35,89,851	2,58,845	—22,18,777	88	65·76
1892	9,61,10,671	44,33,107	13,47,999	1·40	31,85,511	3,43,266	—21,80,778	82	68·69
1893	9,45,71,662	57,29,918	23,16,567	2·45	35,42,479	5,34,919	—17,60,861	106	59·60
1894	9,51,44,496	58,50,542	20,13,567	2·12	45,87,598	5,57,556	—31,26,587	108	65·44
1895	9,56,02,591	64,68,011	25,88,948	2·71	46,80,290	5,22,407	—26,13,740	119	59·65
1896	9,60,94,738	67,12,230	29,11,959	3·03	44,45,740	7,23,698	—22,57,479	124	56·59
1897	9,67,12,838	64,92,310	27,82,625	2·88	42,62,986	6,97,133	—21,77,394	119	56·96
1898	9,74,57,550	50,61,971	15,62,414	1·54	41,10,275	5,44,277	—31,52,138	93	70·32
1899	9,78,60,569	58,70,616	18,93,602	1·94	40,19,557	3,95,332	—25,00,887	108	67·72
1900	9,82,62,274	64,66,526	22,81,366	2·32	40,02,119	5,81,807	—23,00,560	119	64·69
1901	9,84,64,113	58,29,471	17,31,134	1·75	40,47,851	4,92,728	—28,04,445	107	70·30
1902	9,88,13,731	64,50,686	23,09,908	2·34	40,79,645	5,03,168	—22,72,905	119	64·24
1903	9,88,51,177	66,72,902	25,50,721	2·58	40,94,983	6,01,136	—21,45,398	123	61·77
1904	9,91,33,895	73,48,458	26,97,722	2·72	41,08,980	7,20,960	—21,32,168	135	63·29

22 (*b*) Birur-Shimoga railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Birur to Shimoga	12-8-96	1-12-99	37·92	37·92

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails, mostly 30 feet long, laid on Mysore teak sleepers, 11 to a rail. The Bhadra bridge is laid with 50 lb. flat-footed steel rails.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—The sharpest curve is of 1,500 feet radius.

Gradients.—The ruling gradient is 1 in 89.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$ · **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*b*) Birur-Shimoga railway (3′ 3⅜″ gauge)—*concld.*

Terms of contract—

The Hindupur and Birur-Shimoga railways are worked under the following contract :—

Contract of—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows :—

Government aid.—The lines are the property of the Mysore State.

Currency of contract.—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract, the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway and the working stores belonging to the railway at a valuation.

Terms of working.—The working expenses of the system excluding expenditure on New Minor Works are divided between these railways and the others, comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000 or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Mysore Durbar.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,90,226	...	...	...	...	...
1897	6,27,263	...	...	...	...	...
1898	15,70,079	...	...	...	...	...
1899	20,85,475	6,186	1,881	0·09	37	69·59
1900	22,94,457	66,227	24,219	1·06	34	63·43
1901	24,01,338	62,058	16,993	0·71	31	72·62
1902	24,05,657	64,006	23,867	0·97	33	63·33
1903	24,07,802	61,526	24,206	1·01	31	60·65
1904	24,06,391	68,224	24,628	1·02	35	63·90

22 (*c*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Guntakal to Dharmavaram	June 1889	1-3-92	62·95		1892	63
Dharmavaram to Hindupur	26-1-91	23-4-93	49·28			
Hindupur to Mysore Frontier	August 1891	17-9-93	7·27		1893 to 1904	119
Total	...	...	...	119·50		

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails, 23 feet 9½ inches long, laid on steel trough sleepers, 9 to a rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is partially fenced with wire.

Curves.—The sharpest curve has a radius of 600 feet, 0·07 mile long, and is situated at mile 63.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Guntakal-Mysore Frontier railway is worked under the following contract :—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—The line is the property of Government.

Currency of contract.—The same as in the case of the Southern Mahratta railway.

Power of Company to surrender contract.—The same as in the case of the Southern Mahratta railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*c*) Guntakal-Mysore frontier railway (3' 3⅜" gauge)—*concld.*

Terms of contract—*concld.*

Terms of working.—The working expenses of the entire system of railways worked by the Company (including this railway), exclusive of Government supervision charges of the Southern Mahratta railway and the Mysore section, are divided between this railway and the other railways worked, in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1893	58,39,806	1,97,874	78,955	1·35	4,67,983	−3,88,978	38	60·00
1894	58,58,414	3,68,951	1,27,874	2·18	2,34,529	−1,06,655	59	65·34
1895	58,71,739	4,39,329	1,81,657	3·09	2,34,689	−52,982	71	58·65
1896	59,00,158	4,80,992	2,10,690	3·57	2,35,666	−24,926	77	56·20
1897	59,02,498	6,38,278	2,75,983	4·68	2,36,000	+39,983	103	56·76
1898	58,98,866	4,25,702	1,32,471	2·25	2,36,026	−1,03,555	69	68·88
1899	58,98,698	3,24,839	1,29,459	2·18	2,35,996	−1,07,537	62	68·62
1900	59,00,046	4,36,116	1,57,837	2·63	2,35,960	−78,123	70	63·81
1901	59,02,583	4,47,318	1,36,659	2·32	2,36,115	−99,456	72	69·45
1902	59,04,714	4,73,972	1,74,320	2·95	2,36,107	−61,787	76	63·22
1903	59,07,192	4,96,481	1,97,075	3·34	2,36,227	−39,153	80	60·31
1904	59,14,710	7,54,378	2,73,879	4·63	2,36,372	+37,507	121	63·69

22 (*d*) Hindupur (Yesvantpur-Mysore frontier) railway (3' 3⅜" gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Yesvantpur to Dodballapur	March 1890	15-12-92	19·93		1892	20
Dodballapur to Mysore Frontier	March 1890	17-9-93	31·42		1893 to 1904	51
Total	...	...	...	51·35		

Details of construction—

Permanent-way.—The rails on the ghat section, 11 miles in length, are 50 lb. flat-footed steel, State railway type, and 41½ lb. flat-footed steel on the remainder of the line, all being 30 feet long. The sleepers are Mysore teak throughout at the rate of 12 to a 41½ lb. rail and 11 to a 50 lb. rail.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout with aloe or cactus, except round station yards which are fenced with wire.

Curves.—The sharpest curve has a radius of 660 feet. Such curves occur between miles 27 and 29 and vary in lengths from 458 to 1,440 feet.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract.—See under Birur-Shimoga railway, page 217.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	24,41,741	...	...	...	...	...
1893	24,46,186	57,635	22,708	0·93	38	60·60
1894	24,34,999	1,61,704	56,504	2·32	61	65·06
1895	24,19,698	1,92,159	79,886	3·30	72	58·43
1896	23,94,762	2,23,900	99,592	4·16	84	55·50
1897	24,79,210	2,69,527	1,18,358	4·77	101	56·09
1898	24,98,316	1,80,081	56,480	2·26	67	68·66
1899	24,98,162	1,49,363	50,528	2·02	56	66·17
1900	24,98,047	1,88,183	67,135	2·69	70	64·32
1901	24,94,729	1,97,798	60,724	2·43	74	69·30
1902	24,97,811	2,13,486	77,908	3·12	80	63·51
1903	24,97,206	2,42,695	96,159	3·85	91	60·38
1904	24,88,842	3,67,923	1,33,715	5·37	138	63·66

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*e*) Kolhapur railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Kolhapur to Miraj	February 1888	21-4-91	29·27	29·27

Details of construction—

Permanent-way.—The permanent-way consists of 41 ¼lb. flat-footed steel rails, mostly 23 feet 9½ inches long, laid on steel trough sleepers, 9 to a rail.

Ballast.—The line is ballasted throughout with gravel and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Kolhapur railway is worked under the following contract:—

Contract of—17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Kolhapur State.

Currency of contract.—The contract may be terminated, upon six months' notice, by either party.

Terms of working.—The working expenses of the system excluding Government supervision charges and New Minor Works, are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Kolhapur Durbar.

Rates and fares.—The same as in force on the Southern Mahratta railway.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1889	13,59,602	...	...	...	...	...
1890	21,37,699	...	...	...	...	...
1891	23,16,183	58,381	20,866	0·90	60	64·26
1892	23,81,946	90,398	29,182	1·23	55	67·72
1893	23,21,687	1,88,096	49,991	2·15	78	57·67
1894	23,05,817	1,93,390	43,632	1·89	82	64·64
1895	23,69,206	1,21,147	51,006	2·15	80	57·90
1896	23,05,912	1,21,655	54,305	2·35	80	55·36
1897	23,24,837	94,630	41,981	1·80	63	55·04
1898	23,24,807	75,271	24,201	1·04	52	69·08
1899	23,24,807	99,195	33,998	1·46	66	65·74
1900	23,24,807	1,24,215	44,875	1·93	82	63·87
1901	23,24,807	1,14,114	35,750	1·54	75	68·67
1902	23,25,187	1,22,913	46,467	2·00	81	62·55
1903	23,26,188	1,21,957	45,053	2·07	80	60·60
1904	23,26,251	1,41,676	58,228	2·29	93	62·43

22 (*f*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	TOTAL MILEAGE OPEN AT THE END OF EACH YEAR FROM THE COMMENCEMENT.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mysore to Nanjangud	...	1-12-91	15·04		1891 to 1898	15
Nanjangud station to Nanjangud town	...	12-7-99	0·76		1899 to 1904	16
TOTAL	...	...	...	15·80		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*f*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, mostly 28 feet 9¼ inches long, laid on Mysore teak with a mixture of jamba sleepers, 9 to a rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is partially fenced with wire.

Curves.—The sharpest curve has a radius of 700 feet and 726 feet long, between miles 14 and 15.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Mysore-Nanjangud railway is worked under the following contract:—

Contract of—14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Mysore State.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1887 terminates. On determination, the Company makes over to the Mysore Government the railway and works and pays to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. The working stores, if mutually agreed upon, to be taken over by the Mysore Government at a valuation.

Terms of working.—After deduction of expenditure on new minor works, which is debited to each railway direct, from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of this railway, is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares.—To be fixed by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	5,92,414	16,478	6,163	1·03	21	62·60
1893	6,18,551	35,812	14,901	2·26	43	58·39
1894	6,06,093	37,448	12,866	2·13	47	65·65
1895	6,09,212	39,160	16,432	2·69	49	57·98
1896	6,09,631	29,322	17,125	2·81	50	56·45
1897	6,34,764	33,497	14,265	2·25	42	57·41
1898	6,43,821	31,493	10,124	1·57	40	67·85
1899	6,46,951	16,810	5,671	0·88	21	66·26
1900	6,53,741	30,860	11,357	1·74	38	63·20
1901	6,56,462	25,302	7,863	1·20	35	72·22
1902	6,56,462	29,370	10,938	1·67	36	63·38
1903	6,56,462	31,923	12,687	1·93	39	60·26
1904	6,56,462	38,873	14,404	2·19	47	62·95

22 (*g*) Mysore Section (Southern Mahratta) (3′-3⅜″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mysore to Mandya	20-9-77	25-2-82	27·97		1881	58
Mandya to Channapatna		20-3-81	23·25		1882	86
Channapatna to Bangalore		1-2-81	34·75		1883	87
Bangalore to Tumkur	6-10-82	11-8-84	43·00		1884	140
Tumkur to Gubbi	18-1-84	26-12-84	11·00		1885	140
Gubbi to Birur	...	12-8-89	76·57		1886	140
Birur to Haribar	...	21-2-89	79·68		1887	140
					1888	140
TOTAL	...	...	...	296·22	1889 to 1904	296

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$ **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*contd.*

22 (g) Mysore Section (Southern Mahratta) (5′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. steel rails with the exception of about 25 miles which are laid with iron rails. The rails are flat-footed, mostly 23 feet 9½ inches long, and are laid on Mysore teak sleepers in general with a small proportion of jamba and steel trough sleepers. The number of sleepers used being at a minimum of 8 per rail of 23 feet 9½ inches.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is only partially fenced with aloe or cactus and wire fencing.

Curves.—The sharpest curve has a radius of 660 feet, 505 feet long, between miles 221 and 222.

Gradients.—The ruling gradient is 1 in 100 between Haribar and Bangalore; and 1 in 70 between Bangalore and Mysore.

Terms of contract—

The Mysore section is worked under the following contract:—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Guarantee of interest in sterling at 4 per cent on £1,200,000 debenture stock.

Terms of contract.—To meet the cost of constructing the Gubbi-Haribar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company may raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract.—Government may determine the contract at any time, on six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then this contract will also be determined. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract.—Nil

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) the net receipts are divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	7,98,213	...	...	...	23,960	...	—23,960	...	...
1880	21,37,736	...	...	...	68,908	...	—68,908	...	...
1881	36,56,345	1,31,525	53,753	1·47	98,912	...	—45,159	51	59·13
1882	45,95,658	2,58,390	1,03,495	2·25	1,68,989	...	—65,494	68	64·11
1883	57,69,957	3,02,895	90,675	1·73	2,19,351	...	—1,19,676	67	67·09
1884	62,64,620	3,61,448	1,65,479	2·64	2,41,052	...	—75,573	67	54·22
1885	64,89,246	4,33,954	2,07,784	3·20	2,51,730	...	—43,946	60	52·12
1886	71,75,111	4,69,274	1,05,385	1·48	5,57,104	...	—4,51,719	65	59·04
1887	91,36,438	5,13,784	1,41,198	1·55	6,70,884	...	—5,29,666	71	71·60
1888	1,25,76,692	5,70,657	52,295	0·42	6,94,210	...	—6,41,915	79	76·28
1889	1,24,24,088	8,96,273	2,22,084	1·54	7,07,500	47,964	—5,33,330	72	75·23
1890	1,47,11,610	11,86,318	2,61,700	0·03	6,18,733	52,871	—4,39,864	77	77·94
1891	1,50,76,285	13,24,525	4,43,717	2·94	6,54,850	96,004	—3,07,137	86	66·50
1892	1,46,96,205	13,99,463	4,47,906	3·06	7,29,624	1,01,305	—3,83,023	89	67·92
1893	1,46,42,217	16,83,203	6,74,705	4·61	7,70,439	1,04,670	—2,60,404	109	59·92
1894	1,47,60,293	14,45,412	4,76,156	3·23	8,33,525	1,33,566	—5,05,935	94	68·99
1895	1,49,22,452	15,75,231	6,20,769	4·23	8,70,947	1,23,096	—3,63,274	103	59·72
1896	8,51,08,257	15,84,981	6,76,873	4·18	8,21,588	1,71,768	—3,16,483	103	57·29
1897	1,51,99,757	19,80,019	7,95,147	5·23	7,75,708	1,80,992	—1,61,553	122	57·54
1898	1,55,07,319	13,92,851	4,13,421	2·67	7,38,461	1,66,986	—4,92,026	90	70·32
1899	1,56,75,416	10,60,469	3,29,033	2·10	7,21,117	76,861	—4,68,945	69	68·97
1900	1,58,70,510	13,76,391	4,71,201	2·97	7,18,200	1,11,070	—3,58,069	89	65·77
1901	1,60,14,879	14,33,240	4,07,791	2·55	7,22,224	1,07,697	—4,22,150	93	71·55
1902	1,60,76,009	15,97,046	5,58,062	3·47	7,21,062	1,16,979	—2,79,959	104	65·00
1903	1,62,24,903	15,35,270	5,82,298	3·59	7,20,000	1,46,896	—2,84,598	100	62·07
1904	1,62,59,794	15,85,824	5,63,667	3·47	7,20,000	1,53,391	—3,06,724	103	64·44

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*k*) West of India Portuguese railway (3′ 3⅜″ gauge)—

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Mormugao to Sonauli	April 1881	17-1-87	41·00		1887	41
Sonauli to the Portuguese frontier		3-2-88	10·10		1888 to 1904	51
Total .	...	...	...	51·10		

Details of construction—

Permanent-way.—The permanent-way throughout consists of 62 lb. flat-footed steel rails, State railway type, mostly 24 feet long, on creosoted pine, sal, teak and jamba sleepers, 10 to a rail.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fencing.—The line is partially wire fenced.

Curves.—The sharpest curve is of 720 feet radius, 0·41 mile long, between Mormugao Harbour and mile 1.

Gradients.—The ruling gradient is 1 in 100 with 1 in 40 on the Ghat section.

Terms of contracts—

The West of India Portuguese railway is worked under the following contracts:—

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier, and the harbour at the Port of Mormugao.

The general conditions of the contracts are as follows:—

Government (Portuguese) aid.—5 per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £800,000 and 6 per cent. on £550,000.

Currency of contracts.—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and the West of India Portuguese Railway Companies which took effect from the 1st July 1902 is to continue in force for five years subject to amendment or determination after two years on six months' notice by either party.

Power of Company to surrender contract.—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company may at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on its capital. On surrender of the contract, the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.

Terms of working by Southern Mahratta Railway Company.—The West of India Portuguese and the Southern Mahratta railways are worked as one concern and the expenses of the system (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines) are divided in proportion to their gross earnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao and the amount to be charged for working to be the actual expenses of working and maintenance *plus* 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (j)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22 (*h*) West of India Portuguese (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

Rates and fares.—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

Statistics of working—

Calendar year.	Table I. Capital outlay (including outlay on Harbour works) to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	1,63,14,170	4,75,437	67,001	0·41	138	74·24
1891	1,63,22,139	5,44,014	1,21,583	0·74	157	86·01
1892	1,63,00,901	3,74,681	11,107	0·07	109	106·01
1893	1,62,74,816	5,86,705	1,65,969	1·01	168	78·13
1894	1,63,12,813	5,49,673	1,19,382	0·73	157	86·47
1895	1,63,31,966	5,83,077	1,12,136	0·69	166	80·75
1896	1,63,80,444	2,97,176	—78,893	...	90	137·34
1897	1,63,40,168	1,79,722	—1,60,785	...	55	189·46
1898	1,62,97,448	2,20,870	—1,10,145	...	65	173·60
1899	1,62,96,432	5,72,475	1,64,665	1·01	157	83·15
1900	1,63,29,262	3,33,596	—66,845	...	96	120·04
1901	1,63,42,023	3,68,120	—48,589	...	205	113·20
1902	1,63,08,793	3,54,657	51,387	0·37	133	85·51
1903	1,63,08,793	3,96,235	1,51,113	1·10	149	61·86
1904	1,63,08,793	4,89,786	1,83,414	1·33	184	62·55

22 (*i*) Bellary-Rayadrug (3′ 3⅜″ gauge)—

The construction of the Bellary-Rayadrug and Hospet-Kottur railways by the agency of the Southern Mahratta Railway Company has been sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to the period of scarcity. (See also Madras railway system).

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
		Probable date.	Miles.	Miles.
Bellary to Rayadrug	24-10-02	June 1905	33·00	33·00

22 (*j*) Hospet-Kottur (3′ 3⅜″ gauge)—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Hospet to Kottur	24-10-02	1-4-05	44·10	44·10

Details of construction—

Permanent-way.—The permanent-way consists of 41½ lb. flat-footed steel rails, 30 feet long, laid on pine, jamna and teak sleepers, 11 to a rail on the straight and 12 on the curves.

Ballast.—The line will be ballasted with gravel and stone.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 22}{\text{Sub-head } (a) \text{ to } (j)}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*concld.*

22 (*i*) Hospet-Kottur (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 575 feet radius, 1,124 feet long, between mile 0 and 1.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The line is to be worked by the Southern Mahratta Railway Company on the basis of actual cost of working.

Number $\frac{\text{Main head } 3}{\text{Sub-head } (a)}$. **UDAIPUR-CHITOR RAILWAY** (3′ 3⅜″ gauge)—

Running powers—

Home line over Foreign line.	Miles.
Rajputana-Malwa railway, Berach to Chitor.	1·42

The line is owned and has been worked by the Udaipur State, since the 31st December 1897, prior to which date it was worked by the Bombay, Baroda and Central India railway as a temporary measure.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Berach near Chitorgarh to Debari near Udaipur	Feb. 1894	1-8-95	60·39		1895 to 1897	60
Separate station at Chitorgarh	2-6-98	15-8-98	0·47			
Debari to Udaipur		25-8-99	6·44		1898	61
Total ...	...	...	...	67·30	1899 to 1904	67

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 30 feet long, laid on deodar sleepers, 11 to a rail.

Ballast.—The ballast consists of broken stone.

Fencing.—The line is fenced round stations only.

Curves.—On the Berach-Debari section, the sharpest curve is of 1,146 feet radius and is 0·54 mile in length; and on the extension from Debari to the Ahr river near Udaipur at the 61st mile, the sharpest curve has a radius of 820 feet and is 0·16 mile in length.

Gradients.—The ruling gradient is 1 in 120, except on the section Debari to Udaipur, where it is 1 in 100.

Terms of contract—

The line is owned and worked by the Udaipur State.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1893	7 000	...	...	...	...	...
1894	2,70,472	...	...	...	...	...
1895	13,39,850	54,702	18,778	1·40	42	65·67
1896	15,63,721	1,35,219	53,750	3 44	43	60·25
1897	15,99,040	1,23,175	42,881	2·68	39	65·19
1898	17,89,252	1,48,832	61,364	3 43	46	57 33
1899	19 89,912	2,10,540	1,04 829	5 27	63	50·21
1900	19,80,010	3,17,928	1,85,703	9 38	91	41·59
1901	20,61,858	2,22,175	94,112	4·56	63	57·65
1902	20 65,670	2,17,388	97,131	4·70	62	55·32
1903	20,66,171	1,77,817	66,446	3 21	51	62·63
1904	20 66,093	1,51,293	53,175	2·57	43	64·86

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 24}{\text{Sub-head } (a)}$. **BARASET-BASIRHAT LIGHT RAILWAY** (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Baraset to Basirhat	3-4-03	1-2-05	26·06	26·06

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. Vignole's steel rails, 30 feet long, laid on pyinkado sleepers from mile 1 to 6, on sal from mile 7 to 18 and on Australian jarrah from mile 19 to 26. There are 12 sleepers to a rail on the 9th and 10th miles and 11 sleepers on the remainder.

Ballast.—The line is ballasted with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 400 feet.

Gradients.—The maximum grade is 1 in 250.

Terms of contract—

The line is worked on the terms contained in the Bengal Government Notification No. 86 R., dated the 15th May 1903, under the following agreement:—

Agreement—of 14th December 1897 (between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company).

The general conditions are as follows:—

Aid by District Board.—The District Board guarantees such an annual subsidy as will make the net profits equivalent to Rs. 1,500 per annum per mile of line declared open, subject to a maximum of Rs. 38,000, and allows the free use of the District road not exceeding 8 feet on one side. (The Company to acquire at its own expense land necessary for stations and diversions.)

Currency of agreement.—Upon the expiration of twenty-one years from the date of the order authorising the construction, by giving six months' notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding together with a bonus of twenty per cent. thereon.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital *plus* not more than 4 per cent. on debenture capital will be equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company may vary its rates.

Number $\frac{\text{Main head } 25}{\text{Sub-head } (a)}$. **BARSI LIGHT RAILWAY** (2′ 6″ gauge)—

	Open Miles.	Under construction Miles.	Total Miles.
Mileage	21·59	57·37	78·96

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
			Miles.	Miles.		Miles.	
Barsi Road Junction to the town of Barsi	1-8-95	1-3-97	21·59				
Total open mileage	...	...	...	21·59	1897 to 1904	22	
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—							
Barsi Road Junction to Pandharpur	6-1-98	...	30·67				On the Pandharpur and Tadwala extensions only the earth work has been thrown up as famine work.
Barsi town to Tadwala	20-11-00	...	26·70				
Total, Lines under construction	...	...	...	57·37			
GRAND TOTAL	...	...	...	78·96			

Details of construction—

Permanent-way.—The permanent-way consists of 35 lb. flat-footed steel rails, 24 feet long, laid on steel sleepers, 10 to a rail.

Ballast.—The line up to mile 13¼ is ballasted with stone as bottom ballast and moorum for boxing the road, the remaining length is ballasted with hard moorum only.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 25}}{\text{Sub-head (a)}}$. BARSI LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Fencing.—The line is unfenced except for a short distance on either side of level crossings and at bridges, where an efficient fencing consisting of rail posts and gas piping is provided. The Barsi Road Junction and Barsi Town stations are also fenced with wire.

Curves.—The sharpest curve has a radius of 450 feet. There are two such curves, one 670 feet long at the beginning of the line and the other 790 feet at mile 21·23 towards Barsi Town station.

Gradients.—The ruling gradient is 1 in 100. There are two gradients steeper than this, one 1 in 89 between miles 1·63 and 1·79, 800 feet long, and the other 1 in 90 between miles 7·00 and 7·46, 2,406 feet long.

Terms of contracts—

The Barsi Light railway is worked under the following contracts:—

Contracts of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Road Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

The general conditions of the contracts are as follows:—

Government aid.—The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction stations only. Land is provided free for the extensions.

Currency of contracts.—Government may determine the contract on the 1st January 1924, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, Government are to pay the Company in England in sterling an amount equal to the total paid-up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	2,337	...	...	...	...	...
1896	10,06,657	...	...	...	...	...
1897	13,43,891	1,07,778	21,560	1·60	115	80·00
1898	13,42,592	1,30,321	24,559	1·83	116	81·15
1899	13,56,809	1,56,113	64,475	4·75	139	58·63
1900	13,56,501	1,24,440	42,440	3·13	111	65·90
1901	12,99,589	1,48,238	79,583	6·13	150	52·69
1902	12,18,242	1,50,275	52,879	4·02	134	64·81
1903	12,59,175	1,30,694	53,423	4·24	116	59·12
1904	13,18,293	1,64,934	64,952	4·93	149	61·09

Number $\frac{\text{Main head 26}}{\text{Sub-head (a)}}$. BUKHTIARPORE-BEHAR LIGHT RAILWAY (2′ 6″ gauge)—

The line has been laid as far as possible on the District road.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Bukhtiarpore on the East Indian railway to Behar	30-5-01	1-7-03	18·50	18·50

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. flat-footed steel rails, chiefly 24 feet long, laid on cross sleepers of pyinkado, 9 to a rail.

Ballast.—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 260 feet. There are 2 such curves, the total length of which is 0·06 mile.

Gradients.—The grades are easy except at bridge approaches and up through the village of Cheru where the grade is 1 in 100.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 26}}{\text{Sub-head (a)}}$. **BUKHTIARPORE-BEHAR LIGHT RAILWAY** (2' 6" gauge)—*concld.*

Terms of contract—

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

Agreement.—Between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company.

The general conditions are as follows:—

Government aid.—In addition to land, which has been provided free of charge, except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

Currency of agreement.—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, *viz.*, upon the expiration of twenty-one years from the date of the order of the Local Government authorising the construction of the line, by giving six months' notice, or at intervals of 7 years thereafter, the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction, together with a bonus of 20 per cent. thereon.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital, *plus* not more than 4 per cent. on debenture capital, will be equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1903	7,47,888	35,800	15,120	2·16	·71	57·77
1904	8,10,059	1,18,180	65,963	8·14	1·18	41·90

Number $\frac{\text{Main head 27}}{\text{Sub-head (a)}}$. **CUTCH STATE RAILWAY** (2' 6" gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Tuna-Anjar section—			Miles.	Miles.
Tuna to Anjar	26-8-03	...	11·86	11·86

The line is being constructed by His Highness the Rao of Cutch.

Number $\frac{\text{Main head 28}}{\text{Sub-head (a)}}$. **DWARA-THERRIA LIGHT RAILWAY** (2' 6" gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Dwara to Maolong	15-5-02	...	13·50	
Maolong to Therria Ghat		...	6·00	
Total . .	...	...	...	19·50

Details of construction—

The work of construction on the Dwara-Maolong section which was started by Mr. G. L. Garth, the promoter, has been suspended on account of his death in June 1904. It will be proceeded with shortly. The work on the Maolong Therria Ghat Section has not yet been authorized.

Terms of contract—

The Dwara-Therria Light railway on completion is to be worked under—

Terms.—Contained in the Notification issued by the Chief Commissioner of Assam under letter No. 44, dated the 14th August 1902.

The general conditions are as follows:—

Government aid.—Land to be provided free of cost.

Currency of contract.—The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract, and take over the railway, with all its equipments, buildings and property, upon giving two years' previous notice, and on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

Rates and fares.—Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Chief Commissioner.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number Main head 29 / Sub-head (a). **KALKA-SIMLA RAILWAY** (2′ 6″ gauge)—

The railway was constructed and is being worked by the Delhi-Umballa-Kalka Railway Company.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
Kalka to Simla	29-6-98	9-11-03	Miles. 59·44	Miles. 59·44

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ lb. flat-footed steel rails, 21 and 24 feet long, on wooden sleepers, 9 to a rail.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced only along the Kalka camping ground and through the skirts of the town of Kalka.

Curves.—Most of the curves are compound, the limiting radius being 120 feet.

Gradients.—The ruling gradient is 1 in 33.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—29th June 1898.—(Between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction and working.

15th November 1901.—Contract supplemental to that of 1898 (embodying terms for change of gauge).

20th January 1903.—Contract supplemental to that of 1898 (embodying terms for the advance of funds for the completion of the line).

The conditions of the contracts are as follows :—

Government aid.—Land provided free.

Terms of contracts.—The line was constructed without a guarantee at the cost of the Delhi-Umballa-Kalka Railway Company, for which purpose the Company is authorised to raise further share capital, in addition to the capital already issued for the existing undertaking, to such an amount as may be mutually agreed upon. The amount agreed upon so far is £600,000. As the actual cost has, however, exceeded this amount Government have arranged owing to sufficient funds not being forthcoming in England to lend the Company the requisite moneys at 4 per cent. interest.

Currency of contract.—Government may determine the contract, on giving twelve months' notice, either on the expiration of twenty-five years from the date on which the railway has been opened for traffic throughout or on the 31st December 1928 or on the expiration of any subsequent period of ten years. Government may also determine the contract, on giving notice, if the Company fails to comply with certain obligations of the contracts. In the former case, Government will pay a sum equal to twenty-five times the amount of the average yearly net earnings during the five years immediately preceding the time of termination, but not exceeding by more than 50 per cent., or not being less than the total capital in sterling expended. In the latter case, Government will pay the fair value of the railway and works.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings will be deducted all charges properly debitable to revenue as working expenses (including any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), and the balance after payment of interest on moneys loaned from Government will represent net earnings for shareholders.

Rates and fares.—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunnels, the Company may vary such rates within the maxima and minima.

Statistics of working—

TABLE I.					TABLE II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1899	5,53,228					
1900	13,18,465	...	...	...	...	...
1901	34,86,993	...	...	...	...	...
1902	92,81,656	...	...	...	...	...
1903	1,41,32,688	...	...	...	...	...
1904	1,68,25,512	32,052	7,022	0·04	77	78·09
		5,90,403	2,06,040	1·24	191	64·75

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 30}}{\text{Sub-head (a)}}$ **MADURA DISTRICT LIGHT RAILWAY** (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Ammayanayakkanur to Kotagudi	30-5-99	...	55·00	
Periyakulam to Krishna-Manaik's Tope		...	5·00	
Theni to Karuvanath		...	33·00	
TOTAL	...	...	...	93·00

Messrs. Wilson and Company of Madras, the Promoters, were originally granted a concession for the construction of these lines under the Indian Tramways Act; but as there is no provision under this Act for payment of interest out of capital during construction, they submitted an amended application for a scheme for Light railways to be constructed under the provisions of the Indian Railways Act. The Promoters were informed that, subject to their acceptance of certain conditions, they might proceed to raise the necessary capital for the line. They accepted the conditions in July 1902 and arranged an agreement with the Madura District Board which has not yet been executed, pending the result of negotiations regarding raising capital in London.

Number $\frac{\text{Main head 31}}{\text{Sub-head (a)}}$. **MORVI RAILWAY** (2′ 6″ gauge)—

The 2′ 6″ gauge connection between Wadhwan and Rajkot by this railway is being converted to the 3′ 3¾″ gauge. From Wadhwan to Thal, 30 miles, there will be a new alignment; onwards to Rajkot, the present alignment with a few unimportant diversions, will be followed. The line between Vankaner and Morvi will, for the present, be retained on the 2′ 6″ gauge.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage open.	
Main line—			Miles.	Miles.		Miles.	
Wadhwan to Dolia	14-12-83	11-3-86	24·00		1885	51	The line between Wadhwan and Rajkot was opened on the 3′ 3¾″ gauge on the 3rd March 1905.
Dolia to Vankaner		20-11-86	27·75		1886	68	
Vankaner to Morvi		24-3-87	16·75		1887	68	
					1888	68	
Total Main line	...	...	...	68·50	1889 to 1904	94	
Rajkot branch—							
Vankaner to Rajkot	10-5-88	1-1-90	25·25				
Extension across the Aji river to Rajkot junction with the Jetalsar-Rajkot railway.	6-1-94	6-8-94	0·61				
Total Branch	...	...	...	25·86			
GRAND TOTAL	...	...	...	94·36			

Details of construction—

Permanent-way.—The permanent-way originally consisted of 19 lb. flat-footed steel rails, 24 feet long, and pressed steel sleepers weighing 11 lb. These have since been extensively replaced in sections by 29 lb. rails and steel trough sleepers weighing 33 lb. In anticipation of conversion of the line to 3′ 3¾″ gauge, 22 miles of the Vankaner-Rajkot section have been relaid with 41¼ lb. rails, 24 feet long, on creosoted pine sleepers, 9 to a rail. The remaining length of the metre gauge is being relaid with 41¼ lb. steel rails, 30 feet long, on half round pucca teak sleepers, 12 to a rail.

Ballast.—The line is ballasted with moorum (decayed trap) and sand.

Fencing.—The line is unfenced.

Curves.—The sharpest curve on the 2′ 6″ gauge is of 320 feet radius, 960 feet long, near Wadhwan. The sharpest curve on the realigned 3′ 3¾″ gauge will be of 950 feet radius, 700 feet long, at Wadhwan.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The Morvi Light railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 31}{\text{Sub-head } (a)}$. **MORVI RAILWAY** (2′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1886	6,88,671	34,822	Not available.	...	30	103·28
1887	11,06,500	1,29,407	16,994	1·54	39	86·87
1888	11,77,842	1,62,087	21,984	1·87	46	86·44
1889	18,96,548	1,77,321	56,726	3·00	50	68·01
1890	20,25,863	2,05,277	87,550	4·32	60	70·34
1891	20,55,599	3,09,419	1,06,617	5·28	63	64·90
1892	21,04,519	3,09,171	1,30,370	6·19	63	57·83
1893	21,57,365	3,22,817	1,45,732	6·75	66	54·86
1894	22,23,526	3,20,348	1,42,667	6·42	65	55·46
1895	23,99,396	3,69,972	2,00,127	8·34	75	45·91
1896	23,82,315	3,86,883	1,81,621	7·62	79	53·06
1897	24,76,757	4,27,484	2,11,642	8·55	87	50·49
1898	24,79,448	3,76,220	1,63,990	6·61	77	56·41
1899	25,06,414	4,20,486	1,70,053	6·78	86	59·56
1900	27,28,115	4,23,308	1,58,794	5·82	86	62·49
1901	27,59,452	3,58,663	1,25,534	4·55	73	65·00
1902	27,32,748	3,05,058	1,13,299	4·56	62	62·85
1903	27,88,452	2,98,066	1,44,786	5·39	61	51·43
1904	34,06,196	3,54,636	1,88,909	5·55	72	46·73

Number $\frac{\text{Main head } 32}{\text{Sub-head } (a)}$. **SHAHDARA-SAHARANPUR LIGHT RAILWAY** (2′ 6″ gauge)—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Shahdara to Saharanpur	4-1-02	Work not commenced.	95·00	
Baraut to Meerut			30·00	
Total	...	...	...	125·00

The construction and working of the line by Messrs. Martin and Company of Calcutta have been authorized by an order contained in the Notification of the Government of the United Provinces of Agra and Oudh, No. $\frac{339}{187}$R., dated the 18th April 1904.

Number $\frac{\text{Main head } 33}{\text{Sub-head } (a)}$. **TARAKESHWAR-MAGRA LIGHT RAILWAY** (2′ 6″ gauge)—

On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Tarakeshwar to Basua	18-12-91	7-11-94	12·50		1894	12
Basua to Magra		8-3-95	18·62		1895 to 1903	31
Total	...	...	...	31·12	1904	33
Tribeni extension—						
Magra to Tribeni	...	14-4-04	2·15	2·15		
Grand Total	...	...	...	33·27		

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. flat-footed steel rails, 26 feet 3 inches long, laid on patent steel sleepers for 10 miles, on pyinkado sleepers for the remainder of the main line and on sal sleepers for the Tribeni extension. There are 10 sleepers to a rail.

Ballast.—The line is laid with sand ballast and brick boxing.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 716·25 feet radius. There are two such curves on the Tribeni extension, the lengths of which are 284 and 421 feet, respectively.

Gradients.—The ruling gradient on the main line is 1 in 1,000; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches; of a total length of 1·88 miles, from the bridge under the East Indian railway to Magraganj station, there is a gradient of 1 in 350, 0·49 mile long. The ruling gradient on the Tribeni extension is 1 in 500.

Terms of contracts—

The Tarakeshwar-Magra Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 1, dated the 4th January 1896 under the following agreements:—

Agreement of—16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Company).

12th March 1904 (between the Secretary of State for India and the Company).

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 33.}}{\text{Sub-head (a)}}$. TARAKESHWAR-MAGRA LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

The general conditions are as follows :—

Government aid.—Free grant of land for the Tribeni extension.

Currency of Agreement.—In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 41 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	9,44,627	74,074	21,902	2·22	46	71·65
1899	9,62,446	66,168	12,192	1·27	41	81·58
1900	9,61,811	76,594	20,961	2·18	47	72·63
1901	9,72,175	83,150	19,890	2·04	51	70·23
1902	9,76,194	84,272	24,842	2·54	52	70·52
1903	10,15,987	85,546	25,350	2·50	53	70·37
1904	10,44,975	89,735	27,564	2·63	52	69·28

Number $\frac{\text{Main head 34.}}{\text{Sub-head (a)}}$. TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge)—

On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Tezpore Ghat to Bindukuri	Oct. 1894	9-8-94	8·10		1894	8
Bindukuri to Balipara		1-9-95	12·00		1895 to 1904	20
Total	...	...	...	20·10		

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. flat-footed steel rails, 24 feet long laid on uriam and nahor sleepers, 2,200 to the mile.

Ballast.—The line is unballasted.

Fencing.—The line is fenced only round stations.

Curves.—In the first mile there are two curves with a radius of 500 feet, the lengths of which are 294 feet and 450 feet, respectively. In station yards the minimum radius is 300 feet.

Gradients.—The ruling gradient is 1 in 125 : between Rangapara and Balipara there is a gradient of 1 in 100 for a length of 0·66 mile.

Terms of contract—

The Tezpore-Balipara Light railway is maintained and worked under—

Terms—contained in the Notification issued by the Chief Commissioner of Assam under letter No. 33, dated the 1st June 1895.

The general conditions are as follows :—

Government aid.—Free use of Government land and a subsidy to the extent of Rs. 5,000 from the Local Board at Tezpore.

Currency of contract.—The Secretary of State may, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract, and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice, and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent. over and above such value.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain rates and fares have been fixed.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 34}{\text{Sub-head } (a)}$. TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Statistics of working—

Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	4,56,927	65,745	20,157	4·41	5,000	25,157	5·51	83	76·49
1899	4,74,177	95,157	26,156	5·52	5,000	31,156	6·57	91	72·51
1900	4,87,240	95,881	25,797	5·29	5,000	30,797	6·32	92	73·12
1901	4,87,240	83,840	16,898	3·47	5,000	21,898	4·49	80	79·84
1902	4,87,240	85,012	21,651	4·45	5,000	26,651	5·47	81	74·53
1903	4,87,240	94,742	27,739	5·67	5,000	32,739	6·71	91	70·72
1904	4,87,240	88,463	17,291	3·54	5,000	22,291	4·57	85	80·43

Number $\frac{\text{Main head } 35}{\text{Sub-head } (a)}$. THATON-DUYINZAIK LIGHT RAILWAY (2′ 6″ gauge)—

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles	Miles.
Thaton to Duyinzaik	1883	11-2-85	7·76	7·76

Details of construction—

Permanent-way.—The permanent-way consists of 20 lb. flat-footed steel rails, Vignole section, of various lengths between 21 and 27 feet, on Dick Kerr's patent iron and pyinkado sleepers. There are 12 to 16 iron and 10 to 18 pyinkado sleepers per rail according to the length of the rail.

Ballast.—The line is ballasted throughout with sand, stone and laterite.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 207 feet, less than 1,000 feet long at Duyinzaik station.

Gradient.—The ruling gradient is 1 in 80.

Terms of contracts—

The Thaton-Duyinzaik Light railway is worked under the following:—

Contract of—10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

Agreement of—6th June 1896 for working the railway and a Steam Launch Service between Moulmein and Duyinzaik.

The general conditions are as follows:—

Government aid.—Land has been provided at a pepper-corn rent, and the proprietors receive Rs. 350 per mensem for the carriage of mails between Moulmein and Thaton *vid* Duyinzaik, including both steamer and railway journeys.

Currency of contract.—The contract is in force for a period of 99 years. After the railway has been open for 30 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway, upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract, if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement.

Terms of working.—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900.

Rates and fares.—Certain maxima have been fixed within which the proprietors are permitted to vary the rates.

Statistics of working—Information not available.

Number $\frac{\text{Main head } 36}{\text{Sub-head } (a)}$. DARJEELING-HIMALAYAN RAILWAY (2′ 0″ gauge)—

The line is laid for a great part of its length along the cart road. The road has almost continuous curves and windings as it passes across the mountains.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Siliguri to Kurseong	1879	23-8-80	31·75	51·00	1880	30
Kurseong to Sonada		1-2-81	9·50		1881 to 1883	50
Sonada to Ghum		5-4-81	5·87			
Ghum to Darjeeling		4-7-81	3·63		1884 to 1904	51
Darjeeling to Darjeeling Bazar		16-6-86	0·25			
Total	...	...	...			

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 36}}{\text{Sub-head (a)}}$. **DARJEELING-HIMALAYAN RAILWAY** (2′ 0″ gauge)—*concld.*

Details of construction—

Permanent-way.—The line in the plain section was originally laid with 30 lb. iron rails, these were relaid with 40 lb. rails which have since been renewed with 41½ lb. flat-footed steel rails. The hill section was laid with 41½ lb. flat-footed steel rails, which are being renewed with a special section steel rail, 41½ lb. to a yard. The length of rails varies from 21 feet to 23 feet 9½ inches and the number of sleepers per rail is 9 to a 23 feet 9½ inches rail, wooden sleepers only are used.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone except near Siliguri where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in.

Curves.—The sharpest curve has a radius of 60 feet on loops Nos. 2 and 4.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukna to Ghoom (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23.

Terms of contract.—The railway is worked under the following contract:—

Contract of—8th April 1879 (between the Secretary of State and the late Mr. Franklin Prestage), for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Government undertake to pay the Company such sum as will make up its gross receipts to two lakhs of rupees annually. Government land and the use of the existing cart road are also granted free of cost.

Currency of contract.—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to it for permanent improvements to the road or works connected with it. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment with an additional bonus of 20 per cent. over and above such value.

Power of Company to surrender contract.—Nil.

Terms of working.—After the first five years, and subject to subsequent modifications of clause 16, half the net profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage of net earnings on capital outlay.	Subsidy from Local Government.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1880	14,33,681	...	34,197	2·39	...	34,197	2·39	...	...
1881	18,18,723	2,61,154	1,15,522	6·35	...	1,15,522	6·35	103	58·32
1882	23,56,112	3,66,474	89,045	3·78	...	89,045	3·78	141	75·70
1883	26,04,804	4,21,944	1,55,725	5·98	...	1,55,725	5·98	162	63·16
1884	27,23,240	4,35,024	1,46,725	5·39	...	1,46,765	5·39	167	66·26
1885	27,27,623	4,31,103	1,63,350	5·99	...	1,63,350	5·99	163	62·11
1886	27,32,136	4,96,476	2,42,109	8·86	...	2,42,109	8·86	188	51·23
1887	27,43,214	4,77,151	2,10,623	7·68	...	2,10,623	7·68	180	55·86
1888	27,71,926	6,14,893	2,83,227	10·22	...	2,83,227	10·22	233	53·92
1889	29,40,123	5,74,297	2,29,117	7·80	...	2,29,117	7·80	217	60·10
1890	29,52,108	5,76,436	2,32,894	7·89	...	2,32,894	7·89	217	59·60
1891	30,59,693	6,18,387	2,58,253	8·44	...	2,58,253	8·44	231	57·61
1892	31,09,079	6,35,778	2,66,647	8·57	...	2,66,647	8·57	240	57·46
1893	31,72,228	6,34,181	2,83,903	8·50	—1,55,418	1,28,485	4·02	239	55·41
1894	31,77,536	6,36,284	2,56,286	8·10	—29,756	2,26,530	7·13	239	59·27
1895	31,99,765	7,39,618	3,59,933	11·25	—61,740	2,98,193	9·32	279	50·92
1896	33,12,782	7,81,594	3,59,667	10·25	—62,087	2,97,580	8·98	294	53·96
1897	33,15,435	7,44,266	3,33,188	10·05	—55,929	2,77,259	8·36	231	55·28
1898	33,65,993	7,54,580	3,41,109	10·13	—59,432	2,81,667	8·37	285	54·79
1899	35,08,469	7,14,985	2,49,779	7·12	—34,933	2,14,837	6·12	270	65·07
1900	34,99,487	8,09,158	3,61,840	10·34	—64,268	2,97,572	8·50	305	55·28
1901	34,78,411	7,87,941	3,13,861	9·02	—49,971	2,63,890	7·58	297	60·17
1902	34,96,507	8,50,280	3,76,005	10·18	—67,704	3,10,301	8·39	321	54·66
1903	36,13,058	9,61,662	4,16,848	11·54	—99,226	3,17,622	8·79	363	56·65
1904	37,38,436	10,45,187	4,75,227	12·71	—97,200	3,78,027	10·11	394	53·46

Number $\frac{\text{Main head 37}}{\text{Sub-head (a)}}$. **HOWRAH-AMTA LIGHT RAILWAY** (2′ 0″ gauge)—

After leaving Telkul Ghât (Howrah,) the line runs through the town of Howrah and along the district road to Amta. Diversions have been made to avoid sharp curves in the road. On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

Two miles, from Howrah to Kadamtolla, are worked over by the Howrah-Sheakhala railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 37}}{\text{Sub-head (a)}}$. **HOWRAH-AMTA LIGHT RAILWAY** (2′ 0″ gauge)—*contd.*

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.	
					Calendar year.	Mileage open.
			Miles.	Miles.		Miles.
Main line—					1897	15
Telkul Ghât (Howrah) to Dumjur	27-3-95	1-7-97	9·20		1898	29
Dumjur to Bargachia		2-10-97	5·87		1899	29
Bargachia to Maju		4-5-98	5·50		1900	29
Maju to Amta		1-6-98	6·62		1901	29
					1902	29
Total Main line	...	...	...	27·19	1903	29
Branch—					1904	37
Bargachia to Jagatbalubpur	27-3-95	2-10-97	1·50			
Jagatbalubpur to Autpur	20-3-02	1-6-04	8·50			
Total Branch	...	...	...	10·00		
TOTAL OPEN MILEAGE	...	...	...	37·19		
LINES UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—						
Autpur to Champadanga	20-3-02	...	9·00			
Autpur to Rajbalhat		...	3·50			
Total mileage under construction	...	...	...	12·50		
GRAND TOTAL	...	...	...	49·69		

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lb. to the yard, laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients.—The line is practically level throughout.

Terms of contracts—

The Howrah-Amta Light railway is worked on the terms contained in the Bengal Government Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements :—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1900 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

The general conditions are as follows :—

Aid by the District Board.—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, a clear width of 14 feet being left for vehicular traffic.

Currency of agreement.—The District Board has the power of determining the agreements after 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number Main head 37 / Sub-Head (a) · **HOWRAH-AMTA LIGHT RAILWAY** (2′ 0″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage of net earnings on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898 . . .	11,24,713	1,89,519	78,910	7·02	—15,062	66,848	5·68	152	58·36
1899 . . .	11,41,307	2,50,763	1,12,794	9·88	—27,835	84,959	7·44	168	55·02
1900 . .	11,88,283	2,56,418	1,23,104	10·36	—30,244	92,860	7·81	172	51·99
1901 . . .	11,96,697	2,60,530	1,14,032	9·53	—26,146	87,936	7·35	175	56·21
1902 . . .	12,68,532	2,65,497	1,38,120	10·49	—29,703	13,417	8·15	178	49·86
1903 . . .	12,88,353	2,77,451	1,37,333	10·69	—31,383	1,05,950	8·22	186	50·32
1904 . . .	15,91,321	2,67,062	1,54,998	9·74	—35,416	1,19,582	7·51	170	47·82

Number Main head 38 / Sub-head (a). **HOWRAH-SHEAKHALA LIGHT RAILWAY** (2′ 0″ gauge)—

On the 13th January 1899, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

The Howrah-Sheakhala Light railway works over 2·00 miles of the Howrah-Amta Light railway from Howrah to Kadamtolla.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement. Calendar year.	Mileage open.
Main line—			Miles.	Miles.		Miles.
Kadamtolla to Chanditala	27-3-95	2-8-97	8·88		1897	17
Chanditala to Kistrampur		10-9-97	3·75		1898 to 1904	20
Kistrampur to Sheakhala		7-11-97	4·75			
Total Main line .	...	...	...	17·38		
Branch—						
Chanditala to Janai	27-3-95	5-5-98	2·37			
Total Branch .	...	...	...	2·37		
Grand Total .	...	...	...	19·75		

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lb. to the yard, laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients.—The line is practically level throughout.

Terms of contracts—

The Howrah-Sheakhala Light railway is worked on the terms contained in the Bengal Government Notification No. 112, dated the 26th March 1895, under the following agreements:—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

The general conditions are as follows:—

Aid by the District Board.—The District Board have guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, provided that there shall nowhere be a less width of metalled road clear of the inner rail of the line than 16 feet.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head 38}}{\text{Sub-head (a)}}$. HOWRAH-SHEAKHALA LIGHT RAILWAY (2′ 0″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of agreement.—The agreement is current for a period of 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1888 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted, a bonus of 15 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company are in excess of 4 per cent. upon the capital of the Company actually paid up and expended for the time being, surplus profits are divided between the Company and the District Board in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage of net earnings on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	6,09,398	76,166	16,768	2·75	4,267	21,035	3·45	70	72·12
1899	6,09,434	73,396	21,453	3·52	—250	21,203	3·48	65	70·77
1900	6,09,446	76,019	26,824	4·40	—999	25,825	4·24	74	64·71
1901	6,09,446	75,579	23,165	3·80	1,108	24,273	3·98	77	70·52
1902	6,09,565	82,019	31,739	5·20	—350	31,189	5·12	80	61·23
1903	6,14,715	87,049	34,950	5·68	—668	34,282	5·57	85	59·85
1904	6,14,715	86,261	39,055	6·35	—2,747	36,308	5·91	84	54·72

Number $\frac{\text{Main head 39}}{\text{Sub-head (a)}}$. JORHAT (STATE) RAILWAY (2′ 0″ gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jorhat.

Progress in opening—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.	Total mileage open at the end of each year from the commencement.		Remarks.
					Calendar year.	Mileage, open.	
Main line—			Miles.	Miles.		Miles.	
Gosaigaon to Jorhat	13-9-83	15-12-84	7·00		1884	12	Open mileages shown are those which actually existed in the years named. The differences as compared with the mileage of the sections as on 31st December 1904 are principally due to changes in the cold weather extensions.
Jorhat to Dhali river		15-12-84	9·50		1885	29	
Dhali river to Titabar		16-7-87	1·75		1886	27	
Extension of line from Gosaigaon to Borghop (cold weather line).	...	22-10-01	5·00		1887 to 1889	31	
Total Main line	...	...	...	23·25			
Mariani branch—					1890 to 1899	28	
Chenimara Junction to Mariani	13-9-83	7-1-85	7·00				
Total Branch	...	...	...	7·00	1900 to 1904	30	
Grand Total	...	...	...	30·25			

Details of construction—

Permanent-way.—Excepting 2·51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 30 lb. to the yard, the whole line including the section from Gosaigaon to Borghop is laid with steel rails, 18 lb. to the yard.

Ballast.—The line is unballasted.

Fencing.—The railway land acquired for stations and buildings at Jorhat only is demarcated by barbed wire fencing.

Curves.—The sharpest curve has a radius of 480 feet and is 468 feet in length.

Gradients.—Of a total mileage of 30·25 miles, 4 miles are on a gradient of 1 in 800.

Terms of contracts—

The line is owned and worked by the State.

APPENDIX 38—*concld.*

History of railways constructed and in progress.

[For Index see page 98.]

Number $\frac{\text{Main head } 39}{\text{Sub-head } (a)}$. **JORHAT (STATE) RAILWAY** (2' 0" gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1884	4,38,333	1,161	—488	...	17,533	—18,016	40	141·60
1885	5,14,641	31,328	—7,455	...	19,395	—26,850	25	123·14
1886	5,34,608	38,271	—13,887	...	22,026	—35,913	28	136·28
1887	6,79,572	49,199	—13,772	...	26,608	—40,380	33	127·99
1888	7,10,376	55,477	75	...	27,807	—27,732	38	90·86
1889	7,33,640	59,665	—3,543	...	29,057	—32,600	42	105·94
1890	7,42,351	61,967	6,162	0·85	29,448	—23,286	44	90·06
1891	7,51,421	64,583	1,483	0·20	30,026	—28,543	47	97·70
1892	7,54,791	66,079	11,789	1·56	30,107	—18,318	48	82·16
1893	7,99,680	69,810	14,436	1·81	32,013	—17,577	52	79·33
1894	8,18,184	71,933	11,201	1·37	32,587	—21,386	52	84·43
1895	8,28,409	84,696	18,720	2·26	32,919	—14,199	61	77·81
1896	8,65,300	89,996	13,745	1·59	33,592	—19,847	65	84·73
1897	9,02,416	96,186	14,124	1·57	36,102	—21,978	69	85·33
1898	9,09,445	95,958	20,135	2·21	36,179	—16,044	70	79·02
1899	9,31,626	96,488	—5,946	...	37,228	—43,174	72	106·16
1900	9,08,643	86,695	—15,664	...	36,341	—52,005	63	118·05
1901	9,01,038	83,184	—4,169	...	36,248	—40,417	56	105·01
1902	8,95,693	86,641	—3,655	...	36,237	—39,892	57	104·22
1903	9,03,843	90,710	13,594	1·51	36,408	—22,814	59	85·01
1904	9,03,781	74,293	—3,840	...	36,260	—40,100	47	105·17

Number $\frac{\text{Main head } 40}{\text{Sub-head } (a)}$. **MATHERAN LIGHT RAILWAY** (2' 0" gauge)—

Name and section of railway.	Date of sanction.	Date of opening.	Mileage.	Total.
			Miles.	Miles.
Neral to Matheran	20-6-04	...	12·79	12·79

The construction of the line by Mr. Abdul Husein Adamjee Peerbhoy, of Bombay, has been authorized by an order contained in the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 28th July 1904. On completion the line will be worked by the Great Indian Peninsula Railway Company.

APPENDIX 39.

Statement showing the total working expenses on the 5′ 6″ gauge railways during the year 1904, divided in proportion between coaching and goods, under gross receipts, total train-mileage and gross ton-mileage.

5′ 6″ GAUGE LINES.

Number.	RAILWAY. 1904.	Total working expenses.	GROSS RECEIPTS. Appendix 18. Item No. 21. Coaching.	GROSS RECEIPTS. Appendix 18. Item No. 89. Goods.	TRAIN-MILES. Appendix 18. Item No. 22. Coaching.	TRAIN-MILES. Appendix 18. Item No. 90. Goods.	TON-MILES INCLUDING DEAD WEIGHT. Appendix 18. Item No. 73. Coaching.	TON-MILES INCLUDING DEAD WEIGHT. Appendix 18. Item No. 109. Goods.
		(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands.)	(In thousands.)	(In millions.)	(In millions.)
2 (a)	Bengal-Nagpur	90·23	67·09	109·27	2,049·59	2,856·24	528·08	1,131·96
	Proportion	...	1	1·63	1	1·39	1	2·14
3 (a) to (f)	Bombay, Baroda and Central India ...	93·67	66·94	123·09	1,939·34	1,166·06	505·05	702·81
	Proportion	...	1	1·84	1·66	1	1	1·39
4 (a)	Eastern Bengal State	57·80	36·83	64·66	1,174·14	979·31	280·38	477·37
	Proportion	...	1	1·76	1·20	1	1	1·70
5 (a) to (d).	East Indian	266·82	233·47	541·11	6,627·76	2,759·72	1,992·29	5,924·03
	Proportion	...	1	2·32	1	1·47	1	2·97
6 (a) to (f).	Great Indian Peninsula	291·52	159·07	419·15	6,385·26	8,266·94	1,606·37	3,485·09
	Proportion	...	1	2·64	1	1·20	1	2·17
7 (a) to (e).	Madras	111·29	71·83	112·88	2,110·07	3,777·12	517·08	1,023·80
	Proportion	...	1	1·57	1	1·79	1	1·98
9 (a) & (b).	Nizam's Guaranteed State ...	16·83	9·92	34·48	291·18	675·46	89·22	282·71
	Proportion	...	1	3·48	1	2·32	1	3·17
10 (a) to (e).	North Western State	310·50	177·79	469·50	7,524·17	9,574·96	1,633·17	4,594·13
	Proportion	...	1	2·64	1	1·27	1	2·81
11 (a) & (b).	Oudh and Rohilkhand State ...	83·13	66·51	75·69	2,763·12	2,055·35	658·64	830·45
	Proportion	...	1	1·14	1·35	1	1	1·26

APPENDIX 39—*concld.*

Statement showing the total working expenses on the 3′ 3⅜″ gauge railways during the year 1904, divided in proportion between coaching and goods, under gross receipts, total train-mileage and gross ton-mileage.

3′ 3⅜″ GAUGE LINES.

Number.	RAILWAY. 1904.	Total working expenses.	GROSS RECEIPTS. Appendix 18.		TRAIN-MILES. Appendix 18.		TON-MILES INCLUDING DEAD WEIGHT. Appendix 18.	
			Item No. 21. Coaching.	*Item No. 89.* Goods.	*Item No. 22.* Coaching.	*Item No. 90.* Goods.	*Item No. 73.* Coaching.	*Item No. 109.* Goods.
		(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands)	(In thousands)	(In millions.)	(In millions.)
3 (*g*) to (*l*).	Rajputana-Malwa	109·26	79·45	150·04	3,151·50	3,362·98	509·65	950·04
	Proportion	...	1	1·89	1	1·07	1	1·86
4 (*b*) and (*c*).	Eastern Bengal State	49·56	35·44	44·57	1,214·82	1,198·46	173·67	305·22
	Proportion	...	1	1·26	1·01	1	1	1·76
9 (*c*)	Hyderabad-Godavari Valley ...	14·37	8·09	13·22	358·52	430·37	74·48	82·20
	Proportion	...	1	1·63	1	1·20	1	1·10
12 (*a*)	Assam-Bengal	27·98	13·03	14·47	414·13	720·22	81·90	131·35
	Proportion	...	1	1·11	1	1·74	1	1·60
13 (*a*) & (*b*).	Bengal and North-Western ...	51·51	59·96	66·68	2,388·54	2,031·35	427·21	535·67
	Proportion	...	1	1·11	1·18	1	1	1·25
15 (*a*) to (*d*).	Bhavnagar-Gondal-Junagad-Porbandar	10·56	12·14	9·65	309·19	227·79	49·76	48·82
	Proportion	...	1·26	1	1·30	1	1·02	1
16 (*a*)	Burma	85·32	70·39	78·01	1,962·92	2,546·69	380·13	557·94
	Proportion	...	1	1·11	1	1·30	I	1·47
19 (*a*) to (*e*).	Jodhpur-Bikaner	13·51	12·01	17·87	484·96	568·52	87·81	122·05
	Proportion	...	1	1·49	1	1·17	1	1·39
20 (*a*) & (*b*).	Rohilkund and Kumaon	8·93	8·40	10·10	319·59	346·26	46·72	70·06
	Proportion	...	1	1·20	1	1·08	1	1·50
21 (*a*) to (*f*).	South Indian	60·61	73·63	58·37	2,249·47	2,041·13	360·59	401·30
	Proportion	...	1·26	1	1·10	1	1	1·09
22 (*a*) to (*h*).	Southern Mahratta	68·50	37·77	68·46	1,487·62	2,543·89	243·26	512·60
	Proportion	...	1	1·81	1	1·71	1	2·12

APPENDIX 40.

Report of the Railway Board on the development and working of Indian Railways (17th March 1905).

The budget grant for 1904-1905 amounted to Rs. 1200 lakhs which included Rs. 60 lakhs for the purchase of four branch railways. During the year a sum of Rs. 25 lakhs, which could not be utilized from the Irrigation grant was made available for railway construction. The programme of capital expenditure on railways for the year 1905-1906 provides for an outlay of Rs. 1250 lakhs, which includes the re-allotment of lapses from 1904-1905 to the extent of Rs. 50 lakhs. Open lines and lines under construction will require about 1198 lakhs, leaving only about 52 lakhs available for new lines to be commenced during the coming financial year. The figures are as follows :—

	Allotment. Lakhs.
(*a*) Open lines, including rolling stock	558·01
(*b*) Lines already under construction—	
(i) Begun prior to 1904-1905	406·96
(ii) „ during 1904-1905	232·88
(*c*) New lines to be begun in 1905-1906	52·15
Total	1250·00

2. The principle of providing in the first instance for the needs of open lines and of lines under construction has again been followed. During 1904 an increase of 9,000 wagons was sanctioned. A large number of these are now at work and the balance is under delivery. For the year 1905-1906 a sum of 230 lakhs has been set aside for additional rolling stock and the Railway Board intend to arrange for the early delivery of a substantial portion of the stock so provided for. The growth of expenditure on railway development by Government during the past five years is shown in the following statement :—

Year.	Open lines, including Rolling stock.	Lines under construction.		Total.
		Started in previous years.	Started in current year.	
	Lakhs.	Lakhs.	Lakhs.	Lakhs.
1900-1901 (actual expenditure)	528·22	251·10	18·34	779·66
1901-1902 ditto. .	352·58	509·06	25·64	887·28
1902-1903 ditto. .	481·74	452·50	71·52	1005·76
1903-1904 ditto. .	558·77	313·68	84·62	957·07
1904-1905 (latest grants) .	523·89	514·70	83·10	1121·69
1905-1906 (proposed grants) .	558·01	639·84	52·15	1250·00

3. The details of the distribution of the allotments for the coming year are shown in Statement A. A list of proposed lines in alphabetical order is given in Statement B. Statement C gives a list of lines under negotiation for construction by private Companies. A complete list of the railways is given in Statement D.

APPENDIX 40—*contd.*

The following are the chief new items of the construction part of the programme, *viz.* :—

I. Lines commenced in 1904-1905 :—

	Railway.	Length in miles.	Allotments.	
			1904-1905.	1905-1906.
	Bengal-Nagpur—			
1	Pench Valley	29	3·65	12·88
	Burma—			
2	Henzada-Kyangin	66	31·50	22·00
3	Pegu-Moulmein	122		48·00
	Great Indian Peninsula—			
4	Warora-Bellarpur	38	8·00	17·00
	Nagda-Muttra—			
5	Nagda-Chambal	142	11·65	30·00
	Nilgiri—			
6	Coonoor-Cotacamund	12	2·30	13·00
	North-Western—			
7	Khushalgarh-Kohat Conversion and Indus Bridge	33	2·96	23·00
8	Shahdra-Sangla	55	7·44	17·00
	Oudh and Rohilkhand—			
9	Allahabad-Jaunpur	57	6·50	24·00
	Ranaghat-Katihar			
10	Katihar-Godagari	105	8·10	23·00
	South Indian—			
11	Mandapam-Rameswaram	12	1·00	3·00
	TOTAL	671	83·10	232·88

II. Lines proposed to be commenced in 1905-1906 :—

	Railway.	Length in miles.	Allotments proposed for 1905-1906.
	Assam-Bengal—		
1	Akhaura-Bhairab Bazar	19	3·65
	Bengal-Nagpur—		
2	Gondia-Chanda	222	10·00
	Bombay, Baroda and Central India (Rajputana-Malwa)—		
3	Viramgam-Malia	83	5·00
	East Indian—		
4	Bhagalpur-Bausi	31	5·00
5	Hooghly-Katwa	65	5·00
	Great Indian Peninsula—		
6	Bombay Harbour branch	8	13·50
7	Reserve	...	10·00
	TOTAL	428	52·15

III. Extensions of the following railway systems are likely to be opened during 1905-1906, and they are detailed on page 251 of Statement D attached hereto :—

	Railway Systems.	Mileage likely to be opened.
1	Bengal and North-Western	281
2	Bengal-Nagpur	33
3	Bombay, Baroda and Central India	100
4	Eastern Bengal	199
5	East Indian	66
6	Indian Midland	3
7	Madras	89
8	North Western	136
9	Southern Mahratta	77
10	Southern Punjab	154
	TOTAL	1,138

[4RB]

APPENDIX 40—*contd.*

4. Besides the railways mentioned in I and II of the preceding paragraph, arrangements have been concluded for the construction of the following lines by private enterprise not directly guaranteed or otherwise aided by the State :—

	Railway.	Gauge.	Length in miles.	Approximate cost in lakhs.
	Bengal and North-Western—			
1	Daronda-Maharajganj	3′ 3⅜″	4	1·61
2	Savan-Thawe	3′ 3⅜″	18	5·99
	Jodhpur-Bikanir—			
3	Merta Road-Merta City	3′ 3⅜″	10	0·80
4	Shahdara-Saharanpur Tramway . . .	2′ 6″	94	44·14
	TOTAL .	...	126	52·54

5. The more important lines under construction which were commenced prior to 1904-1905 are—

1. Gya to Barakar, East Indian railway.
2. Gauhati extension, Eastern Bengal State railway.
3. Azhikhal-Mangalore, Madras railway.
4. Quetta-Nushki } North Western railway.
5. Jech Doab }

6. The Kistna, Tinnevelly and Kurnool District Boards have accepted the offer made by the Government of India to encourage Local Boards to finance light railways in their own districts by advancing them money on the security of their resources, and it is expected that the negotiations for the construction of the Bazwada-Masulipatam, Tinnevelly-Tiruchendur and Kurnool branch railways, will soon be brought to a satisfactory conclusion.

7. At the beginning of the official year 1904-1905, there were 27,138 miles of railway open for traffic and 3,050 miles under construction. At the close of the year 1904-1905 there will be 27,749 miles open and 3,139 miles under construction, giving a combined total of 30,888 miles.

During the current year sanction was accorded to the construction of 700 miles of railways.

8. The railways of India, taken as a whole, for the fifth year in succession show a balance to the credit of the general revenues after paying working expenses, interest charges *and payments for annuities in redemption of Capital.* The approximate figures for 1904-1905, as compared with the three previous years, are as follows :—

	1901-1902. Lakhs.	1902-1903. Lakhs.	1903-1904. Lakhs.	1904-1905. Lakhs.
Surplus of revenue over expenditure .	126·99	34·34	129·10	338·15

9. Compared with the figures of the previous year the results for the year 1904-1905 show an improvement of 209·05 lakhs. The receipts are more by 365·92 lakhs, the working expenses are higher by 106·25 lakhs, while interest charges, etc., have increased by 50·62 lakhs.

APPENDIX 40—*contd.*

STATEMENT A.

Statement of anticipated capital expenditure on railways, open or under construction, for the year 1905-06.

Branch lines under rebate terms are excluded.

(Figures in lakhs and decimals of lakhs.)

No.	RAILWAY.	Grants allotted for 1904-1905.	Distribution of grants durin 1905-1906.
	A.—OPEN LINES.	R	R
	I. (*i*)—STATE, BY STATE AGENCY.		
	Eastern Bengal—		
1	Main line	38·52	37·00
2	Canal Junction-Kankurgachi, duplicating	2·13	0·13
3	Kasipur-Chitpur Improvements	3·98	2·67
4	Kankurgachi Chord	4·20	1·77
5	Jodhpur-Hyderabad (British Section)	0·17	0·46
6	Oudh and Rohilkhand	21·49	29·00
	North Western—		
7	Main line	73·69	96·58
8	Rohri-Samasata, doubling	6·16	30·00
9	Wapora Colliery	—0·58	—0·20
10	Purchase of Railways	45·42	...
11	Reserve	...	25·00
	Total Open Lines, State, by State Agency	195·18	222·41
	I. (*ii*)—STATE, BY THE AGENCY OF MAIN LINE COMPANIES.		
12	Assam-Bengal	21·98	23·00
	Bengal and North-Western—		
13	Tirhoot and Hajipur-Katihar	16·50	9·00
	Bombay, Baroda and Central India—		
14	B., B. and C. I.	...	3·00
15	Rajputana-Malwa	11·50	20·00
	East Indian—		
16	Main line	79·50	57·50
	Great Indian Peninsula—		
17	Main line	92·73	56·00
18	Bhopal-Itarsi (British Section)	0·90	2·22
	Madras—		
19	Nilgiri	2·00	3·00
20	North-East Line (East Coast)	13·24	19·00
	Nazam's Guaranteed State—		
21	Bezwada Extension	0·03	0·03
	South Indian—		
22	Main line	10·50	15·00
23	Pamban Branch	0·62	
	Southern Mahratta—		
24	Guntakal-Mysore Frontier	0·13	0·15
	Total Open Lines, State, by Agency of Main Line Companies	249·63	207·90

APPENDIX 40—*contd.*

Capital expenditure on railways—1905-06—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Grants allotted for 1904-1905.	Distribution of grants during 1905-1906.
		R	R
	A.—OPEN LINES—*contd.*		
	II.—From Capital Account of the old Guaranteed Companies.		
25	Bombay, Baroda and Central India	—3·81	6·00
	Madras—		
26	Main line	12·99	43·00
27	Calicut-Azhikal	—0·31	0·50
	Total Open Lines, old Guaranteed Companies	8·87	49·50
	III.—From Capital Account of Companies other than the old Guaranteed Companies.		
28	Bengal Central	0·17	—0·10
29	Bengal-Nagpur	14·12	9·50
30	Burma	26·15	28·61
	Great Indian Peninsula—		
31	Indian Midland	19·11	17·00
	Rohilkhand and Kumaon—		
32	Lucknow-Bareilly	0·66	1·65
	Southern Mahratta—		
33	Main line	8·26	19·00
34	Mysore Section	1·05	2·20
	Total Open Lines, other Companies	69·52	77·86
	IV.—From Capital Account of Branch Line Companies with Firm Guarantee.		
35	Hardwar-Dehra	0·69	0·34
	Total Open Lines, Branch Line Companies	0·69	0·34

APPENDIX 40—*contd.*

Capital expenditure on railways—1905-1906—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1903-1904.	Grants allotted during 1904-1905.	Distribution of grants during 1905-1906.
		Miles.	R	R	R	R
	B.—CONSTRUCTION OF LINES.					
	I. (i)—State, by State Agency.					
	Lines in Progress.					
36	Agra-Delhi Chord	121	114·31	71·31	42·97	3·62
37	Coonoor-Ootacamund	12	21·45	...	2·30	13·00
	Eastern Bengal—					
38	Golakganj-Gauhati	151	92·31	16·95	16·37	36·00
39	Kaunia-Bonarpara	45	21·79	10·44	8·20	2·14
40	Nagda-Muttra	142*	129·39*	...	11·65	30·00
	North-Western—					
41	Khushalgarh-Kohat, conversion	33	24·46	...	2·96	23·00
42	Khushalgarh-Kohat—Thal	92	61·14	57·84	3·99	0·68
43	Lower Sind Extension	...	...	20·86	12·80	...
44	Quetta-Nushki	83	70·06	37·18	32·69	11·87
45	Sargoda-Shorkot Road (Jech Doab, Southern Section)	103	71·59	11·09	29·82	27·00
46	Shahdara-Sangla	55	28·29	...	7·44	17·00
	Oudh and Rohilkhand—					
47	Allahabad-Fyzabad	97	117·09	96·61	12·10	0·95
48	Allahabad-Jaunpur	57	30·23	...	6·50	24·00
	Ranaghat-Katihar—					
49	Katihar-Godagari	105	104·96	...	8·10	23·00
50	Ranaghat-Murshidabad-Lalgola	98	105·53	45·12	27·54	24·00
51	Reserve	...	...	...	...	15·00
	New lines.					
52	Reserve	...	...	...	...	10·00
	Total	...	...	367·40	224·84	261·26

*These figures are for the Nagda-Kotah Section only.

APPENDIX 40—*contd.*

Capital expenditure on railways—1905-1906—contd.

(Figures in lakhs and decimals of lakhs).

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1903-04.	Grants allotted during 1904-05.	Distribution of grants during 1905-06.
	B.—CONSTRUCTION OF LINES—*contd.*	Miles.	R	R	R	R
	I. (ii)—State by Agency of Main Line Companies.					
	Lines in Progress.					
	Bengal and North-Western (Tirhoot State Railway)—					
53	Mansi-Baptiahi	238	125·72	19·68	35·00	52·00
54	Sakri-Jainagar and others					
	Bombay, Baroda and Central India (Rajputana-Malwa)—					
55	Rewari-Phulera	133	53·25	15·10	27·00	12·00
	Burma—					
56	Henzada-Kyangin	66	54·59	...	31·50	22·00
57	Pegu-Moulmein	122	112·88	...		48·00
	East Indian—					
58	Gya-Barakar	148	206·81	71·01	60·00	60·00
59	Khurja-Hapur	39	26·08	1·01	4·50	13·00
60	Ondal-Sainthia	44	43·55	1·23	10·00	30·00
61	Shikohabad-Farukhabad	66	53·82	15·46	15·00	17·00
	Great Indian Peninsula—					
62	Warora-Bellarpur	38	31·90	...	8·00	17·00
	Madras—					
63	Azhikal-Mangalore	77	129·05	33·61	42·40	30·00
	South Indian—					
64	Travancore Branch (British Section)	50	45·06	39·61	3·94	0·58
65	Ditto Ditto (Native State Section)	58	112·66	106·67	10·13	1·00
66	Rameswaram Extension	12	26·14	...	1·00	3·00
	Total	...	...	303·58	248·47	305·58
	New Lines.					
	Assam Bengal—					
67	Akhaura-Bhairab Bazar	19	13·02	...	...	3·65
	Bombay, Baroda and Central India (Rajputana-Malwa)—					
68	Viramgam-Malia	33	52·11	...	...	5·00
	East Indian—					
69	Bhagalpur-Bausi	31	23·31	...	...	5·00
70	Hooghly-Katwa	65	61·72	...	...	5·00
	Great Indian Peninsula—					
71	Bombay Harbour Branch	8	32·87	...	...	13·50
	Total	...	...	...	...	32·15
	II.—Against the Capital Account of the old Guaranteed Companies.	...	...	...	...	...
	III.—Against the Capital Account of Companies other than the old Guaranteed Companies.					
	Lines in Progress.					
	Bengal-Nagpur—					
72	Hariharpur-Bhojudih	28	26·36			
73	Midnapur-Jherriah	114	236·28			
74	Pench Valley	29	16·53	1167·27	124·49	83·00
75	Sini-Midnapur-Cuttack-Calcutta	360	1003·98			
76	Satpura (Jabalpur-Gondia)	233	126·32			
	Total	...	...	1167·27	124·49	83·00
	New Lines.					
	Bengal-Nagpur					
77	Gondia-Chanda	222	89·34	...	...	10·00
	Total	...	...	...	...	10·00
	IV.—Against the Capital Account of Branch Line Companies with Firm Guarantee.	...	...	...	...	...

APPENDIX 40—*contd.*

Capital expenditure on railways—1905-1906—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Distribution of grants for 1905-1906.	
	ABSTRACT BY OPEN LINES AND CONSTRUCTION.	Rs.	Rs.
	A.—Capital for Open Lines.		
	I. (*i*) State, by State agency	222·41	
	I. (*ii*) State, by agency of Main Line Companies	207·90	
	II. Old Guaranteed Companies	49·50	
	III. Other Railway Companies	77·86	
	IV. Branch Line Companies	0·34	
	Total Open Lines		558·01
	B.—Capital for Lines in Progress and New Lines.		
	I. (*i*) State, by State agency	261·26	
	I. (*ii*) State, by agency of Main Line Companies	337·73	
	II. Old Guaranteed Companies	...	
	III. Other Railway Companies	93·00	
	IV.—Branch Line Companies	...	
	Total Lines in Progress and New Lines		691·99
	GRAND TOTAL		1250·00
	ABSTRACT SHOWING DISTRIBUTION BY FUNDS.		
I.—From Imperial Funds.	(i) By State Agency. (*a*) Open Lines	222·41	
	(i) By State Agency. (*b*) Construction	261·26	
	Total (*i*)		483·67
	(ii) By the Agency of Main Line Companies. (*a*) Open Lines	207·90	
	(ii) By the Agency of Main Line Companies. (*b*) Construction	337·73	
	Total (*ii*)		545·63
	Total I		1029·30
II.—Against the Capital Account of the old Guaranteed Companies.	(*a*) Open Lines	49·50	
	(*b*) Construction	...	
	Total II		49·50
III.—Against the Capital Account of Companies other than the old Guaranteed Companies.	(*a*) Open Lines	77·86	
	(*b*) Construction	93·00	
	Total III		170·86
IV.—Against the Capital Account of Branch Line Companies with firm Guarantee.	(*a*) Open Lines	0·34	
	(*b*) Construction	...	
	Total IV		0·34
Total, I to IV	(*a*) Open Lines	558·01	
	(*b*) Construction	691·99	
	GRAND TOTAL		1250·00

APPENDIX 40—*contd.*

STATEMENT B.

List of proposed new lines in alphabetical order.

No.	Railway.	Length in miles.	Estimated cost.
	ASSAM-BENGAL RAILWAY SYSTEM—		Lakhs.
1	Hajiganj-Shatnal	24	32·82
2	Kalaura-Fenchuganj	16	8·00
	BENGAL-NAGPUR RAILWAY SYSTEM—		
3	Bankura (Bishenpur)-Calcutta . . .	105	246·00
4	Berhampore-Russelkonda	49	14·91
5	Chindwara-Nagpur	113	24·00
6	Ganjam District Light Railways . . .	246	65·33
7	Purulia-Ranchi	75	59·70
8	Vizianagram-Raipur (with Sointilla Branch) .	310	281·00
	BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—		
9	Begum Sarai-Rowsara	14	5·50
10	Bhatni-Bettiah	50	...
11	Captainganj-Padrauna	18	...
12	Jaunpur-Azimgarh	35	...
	BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—		
13	Deesa-Tharad	85	22·72
14	Malia-Bhuj-Badin	195	200·00
	BURMA RAILWAYS SYSTEM—		
15	Bhamo-Momein	146	188·00
16	Daga-Naikban	55	40·00
17	Irrawady bridge at Sagaing	...	44·44
18	Pegu-Syriam	...	...
19	Southern Shan States	112	68·58
20	Thamaing-Malagon	...	4·46
	EASTERN BENGAL RAILWAY SYSTEM—		
21	Dacca-Aircha	45	58·14
22	Ganges bridge at Sara	...	130·00
23	Murshidabad-Azimgang	6	18·06
24	Mymensingh-Netrokona-Bara Ari . .	36	22·16
25	Sara-Serajganj-Jagannathganj . . .	70	...
26	Singhjani-Sherpur-Nalitabari . . .	25	12·39
	EAST INDIAN RAILWAY SYSTEM—		
27	Burdwan-Katwa	34	29·20
28	Cawnpore-Hamirpur	35	10·00
29	Katwa-Ahmedpur	32	32·00
30	Katwa-Azimganj-Barharwa	103	86·37

APPENDIX 40—*contd.*

STATEMENT B.

List of proposed new lines in alphabetical order—concld.

No.	Railway.	Length in miles.	Estimated cost.
			Lakhs.
	GREAT INDIAN PENINSULA RAILWAY SYSTEM—		
31	Belarpur-Warangal	180	...
32	Harpalpur-Kalpi	102	15·91
33	Harpalpur-Nowgong	19	2·98
34	Itarsi-Nagpur	250	...
35	Khamgaon-Jalna	94	32·65
36	Khandwa-Akola-Basim-Purna	252	170·00
37	Multai-Wardha	91	...
38	Muttra-Aligarh	37	30·47
	JODHPUR-BIKANER RAILWAY SYSTEM—		
39	Baran-Ajmir-Marwar	213	137·00
	MADRAS RAILWAY SYSTEM—		
40	Podanur-Palni	59	...
41	Salem-Attur	36	17·60
	NORTH WESTERN RAILWAY SYSTEM—		
42	Badin-Jangshai	70	37·42
43	Bannu-Khanai	361	302·00
44	Jullundur-Kapurthala (British Section)	7	2·99
45	Larkana-Shahdadpur	33	20·00
46	Lodhran-Mailsi	40	30·00
47	Peshawar-Bannu	134	53·00
48	Rawalpindi-Murree, with extensions	50	41·34
49	Sarai Kala-Abbottabad-Srinagar	200	...
	OUDH AND ROHILKHAND RAILWAY SYSTEM—		
50	Pilibhit-Barmdeo	40	20·00
	ROHILKHAND AND KUMAON RAILWAY SYSTEM—		
51	Barhwal-Sitapur	60	23·40
	SOUTHERN MAHRATTA RAILWAY SYSTEM—		
52	Bezwada-Masulipatam	50	22·62
53	Guntur-Repalle	38	17·34
54	Kurnool Road-Kurnool	32	7·11
55	Phirangipuram-Gurzala	51	12·60
	SOUTH INDIAN RAILWAY SYSTEM—		
56	Dindigal-Satyamangalam	119	117·85
57	Nanjangud-Erode	121	123·04
58	Tinnevelly-Tiruchendur	38	...
59	Trichinopoly-Tirukkoyilur	97	74·43

APPENDIX 40—*contd.*

STATEMENT C.

Statement showing proposed lines which are under negotiation for construction by private Companies.

No.	Name of railway.	Length.	Estimated cost.
		Miles.	R
	Bengal—		
1	Mymensingh, *viâ* Netrokona, to Bara-Ari, with branch from Shambhuganj to Gauripur	36	22,16,000
2	Panchkura to Luff Point with terminal and loading arrangements for ships or steamers at the latter place	30	(*a*)
3	Purulia-Ranchi	75	(*b*)
4	Singhjani, *viâ* Sherpur, to Nalitabari	25	12,39,000
5	Sirajganj-Ullapara.	18	11,00,000
	Bombay—		
6	Dholka-Dhandhuka.	40	Not stated
7	Dhandhuka-Ranpur	18	
	Central Provinces—		
8	Kamptee-Deolapar, with Munsar-Ramteck branch	34½	Not stated
	Madras—		
9	Berhampore-Russelkonda	49	14,91,000
10	Bezwada-Masulipatam	50	22,62,000
11	Guntur-Repali	38	17,34,000
12	Kurnool Road (Dhone)-Kurnool	32	7,11,000
13	Phirangipuram-Gurzala	51	12,60,000
14	Tinnevelly-Tiruchendur	38	Not stated
	North-West Frontier Province—		
15	Sarai Kala-Abbottabad-Kashmir frontier	80	91,00,000
	Punjab—		
16	Rawalpindi-Murree, with extensions to Kuldana and Gharial	50	41,34,000
	United Provinces—		
17	Cawnpore-Hamirpur	35½	10,00,000

(*a*) The share capital of the proposed company is £ 250,000, which, at Rs. 15=£ 1, is equivalent to Rs. 37,50,000.
(*b*) The share capital of the proposed company is Rs. 30,00,000.

APPENDIX 40—*contd.*

STATEMENT D.

Memorandum on the construction of railways.

	Open lines on 1st April 1904.	Miles.	Miles.
(i)	Eastern Bengal	278·63	
	North Western	(g)3,123·76	4,543·63
	Oudh and Rohilkhand	(h)1,141·19	
(ii)	Bengal-Central (a)	132·01	
	Bengal-Nagpur	1,684·46	
	Beswada Extension (b)	20·58	
	Bhopal-Itarsi (*British section*) (c)	13·11	
	East Indian	1,935·11	6,783·26
	Godhra-Ruttlam-Nagda (d)	141·14	
	Great Indian Peninsula	1,561·63	
	Indian Midland (e)	865·03	
	Madras (North-East line) (e)	(*f*)407·20	
(iii)	Bombay, Baroda and Central India	(*i*)504·35	1,408·16
	Madras	903·81	
(iv)	Hardwar-Dehra (*j*)	...	32·04
(v)	South Behar (*k*)	78·76	
	Southern Punjab (*l*)	425·33	659·57
	Tapti Valley (*d*)	155·48	
(vi)	A. Delhi-Umballa-Kalka (*k*)	...	162·36
	B. Tarkessur (*k*)	...	22·23
(vii)	A. Bhopal-Itarsi (*Native State section*) (c)	44·29	
	Bhopal-Ujjain (c)	113·27	
	Sind-Goona-Baran (c)	145·63	
	Kolar Gold-fields (c)	9·84	
	Nagda-Ujjain (d)	34·33	709·93
	Nizam's Guaranteed State	330·13	
	Petlad-Cambay (Anand-Tarapur section) (d)	21·50	
	Petlad-Cambay (Tarapur-Cambay section) (d)	10·93	
	B. Jammu and Kashmir (*Native State section*) (*l*)	15·93	
	Ludhiana-Dhuri-Jakhal (*l*)	73·66	201·63
	Rajpura-Bhatinda (*l*)	107·05	
(viii)	Cawnpore-Barhwal (*Metre gauge link*)	(*o*)79·60	
	Eastern Bengal—		
	Northern Behar and Kaunia-Dhubri sections (*including the Teesta-Kurigram branch, and the British section of the Sonbarsari extension*)	533·27	698·79
	Dacca section	85·92	
	Assam-Bengal	749·38	
(ix)	Bengal and North Western—		
	Company's section (m)	670·80	
	Tirhoot section	516·39	
	Burma	1,336·07	
	Guntakal-Mysore frontier (n)	119·59	
	Jodhpur-Hyderabad (*British section*) (o)	123·98	
	Lucknow-Bareilly (p)	237·04	8,140·62
	Mysore section (Southern Mahratta) (n)	296·73	
	Nilgiri (e)	16·99	
	Palanpur-Deesa (d)	17·28	
	Rajputana-Malwa (d)	(*g*)1,619·30	
	South Indian	1,133·13	
	Southern Mahratta	1,013·04	
	Tinnevelly-Quilon (Travancore) (*British section*) (r)	49·50	
(x)	Brahmaputra-Soltanpur (*t*)	...	59·37
(xi)	Tanjore District Board (r)	...	99·46
(xii)	Ahmedabad-Dholka (d)	33·50	
	Ahmedabad-Parantij (d)	54·70	
	Mymensingh-Jamalpur-Jagannathganj (*t*)	52·70	175·80
	Noakhali (Bengal) (u)	34·90	
(xiii)	A Rohilkund and Kumaon	...	53·92
	B Pibru-Sadiya	...	77·50
	C Bengal-Dooars	...	36·40
	Bengal Dooars Extensions	116·56	
	D Deoghur	4·79	139·44
	Sagauli-Raxaul (v)	18·09	
(xiv)	Ledo and Tikak-Margherita (w)	...	11·00
(xv)	Bhavnagar-Gondal-Junagad-Porbandar	(*x*)334·19	
	Bikaner	245·35	
	Dhrangadra (y)	50·83	
	A Jamnagar (y)	(*z*)54·22	1,223·04
	Jetalsar-Rajkot (y)	46·21	
	Jodhpur	454·94	
	Udaipur-Chitor	67·30	
	Birur-Shimoga (n)	37·92	
	Gaekwar's Mehsana (d)	92·63	
	Hindupur (Yesvantpur-Mysore frontier) (n)	51·35	
	Hyderabad Godavari Valley (b)	391·43	
	B Kolhapur (n)	29·37	724·94
	Mysore-Nanjangud (n)	15·80	
	Shoranur-Cochin (e)	64·75	
	Tinnevelly Quilon (Travancore) (*Native State section*) (r)	0·43	
	Vijapur-Kalol-Kadi (d)	41·57	
(xvi)	Karaikkal-Peralam (r)	14·56	
	Pondicherry (r)	7·86	
	West of India Portuguese (n)	51·11	
(xvii)	Dandot Light (3′ 0″) (*l*)	6·18	
	Jorhat (2′ 0″)	30·23	168·41
	Khushalgarh-Kohat-Thal (3′ 6″) (*l*)	91·73	
	Nowshera-Dargai (2′ 6″) (*l*)	40·25	
(xviii)	Bengal-Nagpur—		
	Jubbulpore-Gondia Extension (2′ 6″)	124·21	160·45
	Raipur-Dhamtari (2′ 6″)	56·24	
(xix)	A Darjeeling-Himalayan (2′ 0″)	51·00	58·76
	A Thaton-Duyinzaik (2′ 6″)	7·76	
	B Bokhtiarpur-Behar Light (2′ 0″)	18·60	
	Howrah-Amta Light (2′ 0″)	28·69	
	B Howrah-Sheakhala Light (2′ 0″)	19·75	107·29
	Ranaghat-Krishnagar Light (2′ 6″)	20·25	
	Tezpur-Balipara Light (2′ 6″)	20·10	
	C Bard Light (2′ 6″)	21·20	
	C Kalka-Simla (2′ 6″)	58·44	120·53
	C Powayan Light (2′ 0″) (p)	39·50	
(xx)	Tarakeshwar-Magra Light (2′ 6″)	...	31·12
(xxi)	A Morvi (3′ 0″)	...	94·36
	A Gaekwar's Dabhoi (2′ 6″) (*d*)	68·60	
	B Gwalior Light (2′ 0″) (*c*)	157·46	307·47
	B Parlakimedi Light (2′ 0″) (*aa*)	24·63	
	Rajpipla (2′ 6″) (*d*)	37·37	
	C Cooch Behar (2′ 6″) (*t*)	...	33·60

At the commencement of 1904-1905, *i.e.*, on the 1st April 1904, the total length of railways open for traffic was 27,138·09 miles, made up as follows :—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by the State		4,543·63
(ii) State lines worked by companies		6,783·26
(iii) Companies' lines guaranteed by Government under the old contracts		1,408·16
(iv) Companies' lines guaranteed by Government under modern contracts		32·04
(v) Branch line companies' railways assisted by Government under "Rebate" terms		659·57
(vi) Assisted companies' lines—	Miles.	
A. Subsidized by the Government of India	162·36	
B. Receiving land only from Government	22·23	
		184·59
(vii) Native State lines—		
A. Worked by companies	709·93	
B. Worked by State railway agency	201·63	
		911·56
		14,522·81
3′ 3¾ gauge—		
(viii) State lines worked by the State		698·79
(ix) State lines worked by companies		8,140·62
(x) Companies' lines guaranteed by Government under modern contracts		59·37
(xi) District Boards' lines		99·46
(xii) Branch line companies' railways assisted by Government under "Rebate" terms		175·80
(xiii) Assisted companies' lines—	Miles.	
A. Subsidized by the Government of India	53·92	
B. Subsidized by Local Governments	77·50	
C. Subsidized by District Boards	36·40	
D. Receiving land only from Government	139·44	
		307·26
(xiv) Unassisted companies' lines		11·00
(xv) Native State lines—		
A. Worked by Native States	1,223·04	
B. Worked by companies	724·94	
		1,947·98
(xvi) Lines in Foreign Territory		73·61
		11,513·29
Special (3′ 6″ and 2′ 0″) gauges—		
(xvii) State lines worked by the State		168·41
(xviii) State lines worked by companies		160·45
(xix) Assisted companies' lines—	Miles.	
A. Subsidized by Local Governments	58·76	
B. Subsidized by District Boards	107·29	
C. Receiving land only from Government	120·53	
		286·58
(xx) Unassisted companies' lines		31·12
(xxi) Native State lines—		
A. Worked by Native States	94·36	
B. Worked by companies	307·47	
C. Worked by State railway agency	33·60	
		435·43
		1,101·99
TOTAL		27,138·09

(*a*) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
(*b*) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(*c*) Worked by the Great Indian Peninsula Railway Company.
(*d*) Worked by the Bombay, Baroda and Central India Railway Company.
(*e*) Worked by the Madras Railway Company.
(*f*) Includes 2·66 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Beswada and Kistna Block hut and 0·31 mile of 3′ 3½″ gauge line between Kistna Block hut and Tadepalli.
(*g*) Includes 5·63 miles of military line not used for public traffic and 26·26 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bhatinda and Kot Kapura, worked over by the North-Western State and Rajputana-Malwa railways.
(*h*) Includes 16·79 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Burhwal and Bara Banki, 0·59 mile on the Cawnpore Bridge and 1·81 miles of 3′ 3½″ gauge mileage between the Oudh and Rohilkhand State Railway Cantonment and the Bengal and North-Western Railway City station at Benares.
(*i*) Includes 39·25 miles of 3′ 3½″ gauge mileage between Viramgam and Wadhwan.
(*j*) Worked by the Oudh and Rohilkhand State railway.
(*k*) Worked by the East Indian Railway Company.
(*l*) Worked by the North Western State railway.
(*m*) Although for convenience classed amongst State railways, this line is the property of the Bengal and North-Western Railway Company.
(*n*) Worked by the Southern Mahratta Railway Company.
(*o*) Worked by the Jodhpur-Bikaner railway.
(*p*) Worked by the Rohilkhand and Kumaon Railway Company.
(*q*) Includes 2·10 miles at Ujjain, 3·07 miles between Agra Cantonment, and Jumna East Bank and 0·84 mile between Lahori Gate Cabin and Bowarey Cabin Delhi laid on the 5′ 6″ gauge and 26·29 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Kot-Kapura and Bhatinda, worked over by the Rajputana-Malwa and North Western State railways.
(*r*) Worked by the South Indian Railway Company.
(*s*) Excludes 3·66 miles of the Lucknow-Bareilly railway between Aishbagh and Daliganj, worked over, but includes 16·79 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Burhwal and Bara Banki and 0·59 mile of the Oudh and Rohilkhand State railway on the Cawnpore bridge.
(*t*) Worked by the Eastern Bengal State railway.
(*u*) Worked by the Assam-Bengal Railway Company.
(*v*) Worked by the Bengal and North-Western Railway Company.
(*w*) Worked by the Assam Railways and Trading Company.
(*x*) Includes 5·23 miles of Bhavnagar Dock estates and Junagad quarry lines.
(*y*) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.
(*z*) Includes 3·23 miles of the Bedi Bandar Dock estate lines.
(*aa*) Worked by the Bengal-Nagpur Railway Company.

APPENDIX 40—*contd.*

And the mileage under construction or sanctioned for construction on the same date was 3,049·73 miles, as follows:—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by the State	427·87	
(ii) State lines worked by companies	567·59	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms	156·40	
		1,151·86
5' 3¼" gauge—		
(i) State lines worked by the State	195·87	
(v) State lines worked by companies	718·49	
(vi) District Boards' lines	5·53	
(vii) Assisted companies' lines subsidized by the Government of India	148·00	
(viii) Native State lines worked by companies	130·47	
		1,198·36
Special (2' 6" and 2' 0") gauges—		
(ix) State lines worked by the State	6·80	
(x) State lines worked by companies	174·70	
(xi) Assisted companies' lines—	Miles.	
A. Subsidized by District Boards	140·00	
B. Receiving land only from Government	201·87	
	341·87	
(xii) Unassisted companies' lines	2·15	
(xiii) Native State lines—		
A. Worked by Native States	11·86	
B. Worked by companies	130·11	
C. Worked by State railway agency	22·02	
	163·99	
	689·51	
TOTAL		3,049·73

There was thus a grand total of railways completed and in hand, on the 1st April 1904, of miles . . . . . 30,187·82

Lines under construction or sanctioned.

		Miles.	Miles.	Miles.
(i)	Eastern Bengal—			
	Kakurzachi Chord	2·25		
	Ranaghat to Lalgola	97·50	105·75	
	Panchooria to the Ganges river (*b*)	8·00		
	North Western—			
	Hyderabad to Badin	62·00		
	From a point 12 miles south of Quetta to Nushki	83·50	247·50	427·87
	Sargoda to Shorkot Road	102·00		
	Oudh and Rohilkhand—			
	Allahabad to Phaphamau	7·63		
	Phaphamau to Zafarabad	57·50	84·63	
	Hapur to Meerut	19·50		
	Agra-Delhi Chord	...	120·10	
	Ashikal-Mangalore	...	77·27	
(ii)	Bengal-Nagpur—			
	Bhojudih to Hariharpur	26·96		
	Bhojudih to Parthadihi	2·28		
	Malkera to Mohda	2·40		
	Junction with the Sanetoria branch to Aldih	2·47	41·32	567·59
	Southern half of the Malkera-Katrasgarh cross connection	6·71		
	Jamadoba to Ballisay	5·50		
	East Indian—			
	Manpur to Hariharpur	99·79		
	Gudal to Sainthia	43·63		
	Mile 170½ from Howrah on the Jharia branch to Chandore	4·16	254·01	
	Tesra siding	1·76		
	Khurja to Hapur	38·87		
	Shikohabad to Farukhabad	65·89		
	Great Indian Peninsula—			
	Warora to Bellarpur (*c*)		37·90	
	Madras (North-East line)—			
	Korukkuppettai to Basin Road		0·93	
	Salem-Attur (*a*)		36·06	
(iii)	Southern Punjab—			
	Ludhiana to MacLeod Ganj			156·40
(iv)	Eastern Bengal—			
	Kannia to Bonarpara		44·75	
	Golokganj to the Brahmaputra river opposite Gauhati		151·62	196·37
	Bellary-Ryadrug		33·00	
	Bengal and North-Western—			
	Company's section—			
	Gorakhpur to Bagaha	60·96		
	Uska Bazar to Tulsipur	83·54		
	Gainsari to Jarwa	13·86		
	Tirhoot section—			
	Mansi to Bhaptiahi	60·37	365·39	
	Sinharsa to Murliganj	16·61		
	Sakri to Jaynagar	30·47		
	Bairagnia to Bikonthori	79·85		
	Bettiah to Bagaha	49·35		
(v)	Burma Extensions—			718·49
	Pegu to Martaban (*a*)		121·27	
	Hospet-Kottur		44·10	
	Nilgiri—			
	Coonoor to Ootacamund		11·50	
	Rajputana-Malwa—			
	Rewari to Phulera		133·33	
	South Indian—			
	Tiruppachetti to Sivagunga		9·00	
	Tinnevelly-Quilon (Travancore) (*British section*)—			
	Portion of the British section near the Frontier of the Travancore State		0·91	
(vi)	Tanjore District Board—			
	Arantangi Quarry branch		3·00	
	Adirampatnam Salt siding		1·00	5·53
	Thamblkottai Salt siding		0·53	
(vii)	Rohilkund and Kumaon—			
	Bareilly to Soron		56·00	
	Moradabad to Ramnagar		47·00	148·00
	Laiksa to Kahsipur		45·00	
(viii)	Jaipur—			
	Sanganer to Siwai Madhopur (*c*)		72·85	130·47
	Tinnevelly-Quilon (Travancore) (*Native State section*)—			
	Quilon to the British frontier near Sheecottah		57·62	
(ix)	Jullundur-Kapurthala-Sultanpur (*British section*)—			
	Jullundur to the British Frontier (*d*)			6·80
(x)	Bengal-Nagpur—			
	Jubbulpore-Gondia Extension (5' 6")—			
	Jubbulpore to Neisipur	68·01		
	Neimpur to Mandla	22·67	130·91	
	Seoni to Chhindwara	40·23		174·70
	Morappur-Dharmapuri (2' 6")		18·36	
	Tirupattur-Krishnagiri (2' 6")		25·43	
A	Barasat-Basirhat Light (2' 6")		26·00	
	Howrah-Amta Light (2' 0")—			
	Jagatballubpore to Autpur	8·50		
	Autpur to Champadanga (*a*)	9·00	21·00	140·00
	Autpur to Rajbunhat (*a*)	3·50		
	Madura District Board (2' 6")—			
	Ammayanayakkanur to Kotagudi	55·00		
	Periyakulam to Krishna-Manaik's Tope	5·00	93·00	
(xi)	Theni to Karuvanath	33·00		
	Barsi Light (2' 6")—			
	Barsi Road Junction to Pandharpur	30·67	57·37	
	Barsi Town to Tadwala	26·70		
B	Dwara-Therria Light (2' 6")			
	Dwara to Maolong	13·50		
	Maolong to Therria Ghat (*a*)	6·00	19·50	201·87
	Shahdara-Saharanpur Tramway (2' 6")—			
	Shahdara to Saharanpur	95·00	125·00	
	Barsut to Meerut	30·00		
(xii)	Tarakeshwar-Magra Light (2' 6")—			
	Magra to Tribeni			2·15
A	Cutch (2' 6")—			
	Anjar to Tuna			11·86
	Gaekwar's Dabhoi (2' 6")—			
	Mobha to Masor Road (Kanjat)		6·49	
B	Gwalior Light (2' 0")—			
	Jora Alapur to Shipur		91·62	130·11
	Moharbhanj (2' 6")			
	Baripada Road to Baripada		32·10	
C	Jullunder-Kapurthala-Sultanpur (*Native State section*)—			
	Sultanpur to the British Frontier (*d*)			22·02

(*a*) Commencement of work not authorized.
(*b*) Constructed but not worked.
(*c*) Completion deferred.
(*d*) Commencement of work not authorized and question of gauge not finally settled.

APPENDIX 40—*contd.*

New lines authorised.

		Miles.	Miles.	Miles.
(i)	Nagda-Muttra (Southern Section)— Nagda to the crossing of the Chambal river	141·52		196·69
	North Western— Shahdara to Sangla	55·17		
(ii)	Bengal-Central— Dum Dum to Pattipooker (*a*)	2·68		30·67
	East Indian— Hariharpore to Dhanbaid (*b*) (*c*)	21·43	23·92	
	Nagri to Kusunda (*c*)	1·59		
	Indian Midland— Cawnpore-Collectorgunge branch (*c*)	0·83	4·97	
	Agra-Balinganj branch (*c*)	4·34		
(iii)	Petlad-Cambay (Tarapur Cambay section)— Cambay to Cambay Bandar			1·39
(iv)	Eastern Bengal— Katihar to Godagari			105·00
(v)	Bengal and North-Western— Company's section— Dharonda to Maharajganj	3·00		106·07
	Savan to Thawe	17·00	25·40	
	Tirhoot section— Bhagalpur to Bhagalpur Ghat	4·50		
	Burma— Suburban lines at Bassein (*c*)		3·18	
	Burma Extensions— Henzada to Kyangin		65·66	
	South Indian— Mandapam to Rameswaram Temple	10·12	11·83	
	Tangachimadam to Port Ampthill	1·71		
(vi)	Jodhpur— Merta Road to Merta City			8·95
(vii)	Bengal-Nagpur— Jubbulpore-Gondia Extension (2′ 6″)— Chhindwara to Burecoie	21·36		250·87
	Khurasdeyi to Sirgora	7·76		
	Gondia-Chanda (2′ 6″)— Gondia to Chanda (*d*)	158·00		
	Pauni (Brahmapuri) to Nagpur (*d*)	63·75		
(viii)	Matheran (2′ 0″)— Neral to Matheran			12·79

During 1904-1905, *i.e.*, from 1st April 1904 to the 31st March 1905, 712·43 miles of new railway have been authorised as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by the State	196·69	
(ii) State lines worked by companies	30·67	
(iii) Native State lines worked by companies	1·39	
		228·75
3′ 3¾″ gauge—		
(iv) State lines worked by the State	105·00	
(v) State lines worked by companies	106·07	
(vi) Native State lines worked by Native States	8·95	
		220·02
Special (2′ 6″ and 2′ 0″) gauges—		
(vii) State lines worked by companies	250·87	
(viii) Assisted companies' lines receiving land only from Government	12·79	
		263·66
TOTAL		712·43

Lines opened or likely to be opened.

(ix)	Eastern Bengal— Panchooria to the Ganges river	6·00		92·93
	North Western— Hyderabad to Badin	*61·84	92·93	
	Oudh and Rohilkhand— Allahabad to Paphamau	*7·00	25·09	
	Hapur to Meerut	*18·09		
(x)	Agra-Delhi Chord— Raja Ki Mandi (Agra) to Delhi	*119·94		133·21
	Bengal Central— Dum Dum to Pattipooker (*a*)	2·68		
	Bengal-Nagpur— Junction with the Sanctoria branch to Aldih (*e*)	*2·55	8·49	
	Jamadhoba to Balliary (*f*)	*5·23		
	Southern half of the Malkera-Katrasgarh cross connection (*g*)	0·71		
	Indian Midland— Portion of the Agra-Balinganj branch	2·10		

And 623·49 miles have been or are likely to be opened to public traffic as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(ix) State lines worked by the State	92·93	
(xii) State lines worked by companies	133·21	
		226·14
3′ 3¾″ gauge—		
(xi) State lines worked by companies	121·19	
(xii) Native State lines—		
A. Worked by Native States 8·95		
B. Worked by companies 57·62		
	66·57	
		187·76
Special (2′ 6″ and 2′ 0″) gauges—		
(xiii) State lines worked by companies	108·50	
(xiv) Assisted companies' lines subsidized by District Boards	34·50	
(xv) Unassisted companies' lines	2·15	
(xvi) Native State lines worked by companies	64·44	
		209·59
TOTAL		623·49

(xi)	Bengal and North Western— Company's section— Usia Bazar to Barhni (Bahadurganj)	31·00		121·19
	Tirhoot section— Bettiah to Shikarpur	23·00	81·47	
	Sakri to Jaynagar	30·47		
	Burma— Suburban lines at Bassein		3·18	
	Rajputana-Malwa— Rewari to Narnaul		32·63	
	Tinnevelly-Quilon (Travancore) (*British section*)— Portion of the British section near the Frontier of the Travancore State		6·91	
(xii)	A. Jodhpur— Merta Road to Merta City		8·95	
	B. Tinnevelly-Quilon (Travancore) (*Native State section*)— Quilon to the British Frontier near Shencottah		57·62	
(xiii)	Bengal-Nagpur— Jubbulpore-Gondia Extension (2′ 6″)— Jubbulpore to Neinpur	*69·14	108·50	108·50
	Seoni to Chhindwara	*40·36		
(xiv)	Barasat-Basirhat Light (2′ 6″)		26·00	34·50
	Howrah-Amta Light (2′ 0″)— Jagatbullabpur to Autpur		8·50	
(xv)	Tarakeshwar-Magra Light (2′ 6″)— Magra to Tribeni			2·15
(xvi)	Gaekwar's Dabkoi (2′ 6″) Modha to Masor Road (Kanjat)		6·49	64·44
	Gwalior Light (2′ 0″)— Jora Alapore to Sabalgarh		*25·85	
	Mohurbhanj (2′ 6″)— Baripada Road to Baripada		32·10	

(*a*) Previously treated as a siding.
(*b*) Sanction includes provision for a second track, 25·09 miles in length, from Dhanbaid to Barakar.
(*c*) Sanctioned prior to 1st April 1904.
(*d*) Commencement of work not authorised.
(*e*) Includes 1·30 miles opened prior to the 1st April 1904.
(*f*) Includes 3·49 miles opened prior to the 1st April 1904.
(*g*) Opened prior to the 1st April 1904.
* Correction of mileage.

APPENDIX 40—*contd.*

The total length of open line at the commencement of 1905-1906, *i.e.*, on the 1st April 1905, will, therefore, be 27,749·08 miles comprising—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by the State		4,635·38
(ii) State lines worked by companies		6,917·03
(iii) Companies' lines guaranteed by Government under the old contracts		1,408·36
(iv) Companies' lines guaranteed by Government under modern contracts		32·04
(v) Branch line companies' railways assisted by Government under "Rebate" terms		659·57
(vi) Assisted companies' lines—		
A. Subsidised by the Government of India	162·36	
B. Receiving land only from Government	22·23	
		184·59
(vii) Native State lines—		
A. Worked by companies	709·93	
B. Worked by State railway agency	201·70	
		911·63
		14,748·55
3′ 3¾″ gauge—		
(viii) State lines worked by the State		772·23
(ix) State lines worked by companies		7,377·49
(x) District Boards' lines		99·46
(xi) Branch line companies' railways assisted by Government under "Rebate" terms		174·47
(xii) Assisted companies' lines—		
A. Subsidized by the Government of India	53·92	
B. Subsidized by Local Governments	77·50	
C. Subsidized by District Boards	36·40	
D. Receiving land only from Government	1,023·15	
		1,190·97
(xiii) Unassisted companies' lines		8·50
(xiv) Native State lines—		
A. Worked by Native States	1,231·99	
B. Worked by companies	782·27	
		2,014·26
(xv) Lines in Foreign Territory		73·60
		11,710·98
Special (2′ 6″ and 2′ 0″) gauges—		
(xvi) State lines worked by the State		168·41
(xvii) State lines worked by companies		287·17
(xviii) Assisted companies' lines—		
A. Subsidized by Local Governments	58·76	
B. Subsidized by District Boards	121·54	
C. Receiving land only from Government	120·53	
		300·83
(xix) Unassisted companies' lines		33·27
(xx) Native State lines—		
A. Worked by Native States	94·36	
B. Worked by companies	371·91	
C. Worked by State railway agency	33·60	
		499·87
		1,289·55
TOTAL		¶27,749·08

Open lines on 1st April 1905.

		Miles.	Miles.
(i)	Eastern Bengal	284·93	4,635·38
	North Western	(g) 3,185·60	
	Oudh and Rohilkhand	(h) *1,165·05	
(ii)	Agra-Delhi Chord (a)	*119·94	6,917·03
	Bengal Central (b)	127·9	
	Bengal-Nagpur	*1,695·75	
	Bezwada Extension (c)	20 88	
	Bhopal-Itarsi (*British section*) (a)	13 11	
	East Indian	*1,932·87	
	Godhra-Rutlam-Nagda (d)	141·14	
	Great Indian Peninsula	1,561·63	
	Indian Midland (e)	907·13	
	Madras (North East line) (e)	(f) 497·19	
(iii)	Bombay, Baroda and Central India	(i) 504·35	1,408·36
	Madras	*904·01	
(iv)	Hardwar-Dehra (j)	...	32·04
(v)	South Behar (k)	79·76	659·57
	Southern Punjab (l)	425·33	
	Tapti Valley (d)	155·48	
(vi)	A. Delhi-Umballa-Kalka (k)	...	162·36
	B. Tarkeshwar (k)	...	22·23
(vii)	A. Bhopal-Itarsi (*Native State section*) (a)	44·29	709·93
	Bhopal-Ujjain (a)	113·27	
	Bina-Goona-Baran (a)	145·63	
	Kolar Gold-fields (e)	*9·88	
	Nagda-Ujjain (d)	34·32	
	Nizam's Guaranteed State	330·13	
	Petlad-Cambay (Anand-Tarapur section) (d)	21·50	
	Petlad-Cambay (Tarapur-Cambay section) (d)	10·92	
	B. Jammu and Kashmir (*Native State section*) (l)	*15·99	201·70
	Ludhiana-Dhuri Jakhal (l)	78·06	
	Rajpura-Bhatinda (l)	107·05	
(viii)	Cawnpore-Burhwal (*Metre gauge link*)	(a) 79·00	772·23
	Eastern Bengal—		
	Northern Behar and Kaunia-Dhubri sections (*including the Teesta-Kurigram, and Ranaghat Krishnagar branches, and the British section of the Sonthobari extension*)	*608·71	
	Dacca section	85·92	
	Brahmaputra-Sultanpur	‡	
	Assam-Benyal	740·38	
	Bengal and North-Western (Company's section)	‡	
	Burma	1,340·15	
	Guntakal-Mysore frontier (m)	119·50	
	Jodhpur-Hyderabad (*British section*) (n)	123 93	
	Lucknow-Bareilly (o)	237 06	
(ix)	Mysore section (Southern Mahratta) (m)	298·22	7,377·49
	Nilgiri (e)	16·93	
	Palanpur-Deesa (d)	17 23	
	Rajputana-Malwa (d)	(p) 1,681·93	
	South Indian	1,123·18	
	Southern Mahratta	1,042·04	
	Tinnevelly-Quilon (Travancore) (*British section*) (q)	*50·40	
	Tirhoot (r)	888·45	
(x)	Tanjore District Board (q)	...	99·46
	Ahmedabad-Dholka (d)	33·50	
(xi)	Ahmedabad-Parantij (d)	54·70	174·47
	Mymensingh-Jamalpur-Jagannathganj (t)	*51·37	
	Noakhali (Bengal) (u)	34·90	
(xii)	A. Rohilkhand and Kumaon	...	53·92
	B. Dibru-Sadiya	...	77·50
	C. Bengal-Dooars	...	36·40
	D. Bengal and North-Western	901·30	1,023·15
	Bengal Dooars Extensions	119·56	
	Deoghur	47·79	
	Sarsauli-Rasaul	§	
(xiii)	Ledo and Tikak-Margherita (v)	...	*8·50
(xiv)	A. Bhavnagar-Gondal-Junagad-Porbandar	(w) 334·19	1,231·99
	Bikaner	246·35	
	Dharangadra (x)	20·81	
	Jamnagar (x)	(y) 54·23	
	Jetalsar-Rajkot (z)	4·21	
	Jodhpur	463·89	
	Udaipur-Chitor	67·30	
	B. Birur-Shimoga (m)	32 92	
	Gaekwar's Mehsana (d)	92 63	
	Hindupur (Yesvantpur-Mysore frontier) (m)	61 35	
	Hyderabad-Godavari Valley (e)	*391·13	
	Kolhapur (m)	29·27	782·27
	Mysore-Nanjangud (m)	15·90	
	Shoranur-Cochin (e)	64·75	
	Tinnevelly-Quilon (Travancore) (*Native State section*) (q)	58·05	
	Vijapur Kalol-Kadi (d)	41·37	
(xv)	Karaikkal-Peralam (q)	14·65	73·60
	Pondicherry (c)	7·85	
	West of India Portuguese (m)	*51·10	
(xvi)	Dandot Light (2′ 0″) (l)	6·18	168·41
	Jorhat (2′ 0″)	36·25	
	Khushalgarh Kohat Thal (2′ 6″) (l)	91·73	
	Nowshera-Dargai (2′ 6″) (l)	40·25	
(xvii)	Bengal-Nagpur—		
	Jubbulpore-Mandla Extension (2′ 6″)	*230·93	287·17
	Raipur-Dhamtari (2′ 0″)	56 24	
(xviii)	A. Darjeeling-Himalayan (2′ 0″)	51·09	58·76
	Thaton Jungle (1′ 6″)	7·76	
	B. Barasat-Basirhat Light (2′ 6″)	26·05	121·54
	Bukhtiarpur Behar Light (2′ 6″)	18·80	
	Howrah-Amta Light (2′ 0″)	37·19	
	Howrah-Sheakhala Light (2′ 0″)	19·75	
	Ranaghat-Kri-Jangar Light (2′ 6″)	‖	
	Tezpur-Balipara Light (2′ 6″)	20·10	
	C. Barsi Light (2′ 6″)	21·59	120·53
	Kalka-Simla (2′ 6″)	59·14	
	Rowayan Light (2′ 6″) (o)	39·50	
(xix)	Tarakeshwar-Magra Light (2′ 6″)	...	33·27
(xx)	A. Morvi (2′ 0″)	...	94·36
	B. Gaekwar's Dabhoi (2′ 6″) (d)	91·49	371·91
	Gwalior Light (2′ 0) (a)	183·33	
	Moharbhanj (2′ 6″) (z)	32·10	
	Partiakimedi Light (2′ 6″) (z)	24·29	
	Rajpipla (2′ 0″) (d)	37·37	
	C. Cooch Behar (2′ 6″) (t)	...	33·60

(a) Worked by the Great Indian Peninsula Railway Company.
(b) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.
(c) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(d) Worked by the Bombay, Baroda and Central India Railway Company.
(e) Worked by the Madras Railway Company.
(f) See foot-note (*f*) on page 253.
(g) See foot note (*g*) on page 254.
(h) See foot-note (*h*) on page 253.
(i) Includes 39·25 miles of 3′ 3½″ gauge line between Viramgam and Wadhwan.
(j) Worked by the Oudh and Rohilkhand State railway.
(k) Worked by the East Indian Railway Company.
(l) Worked by the North Western State railway.
(m) Worked by the Southern Mahratta Railway Company.
* Correction of mileage.
† Transferred under Assisted Companies' lines receiving land only from Government.
‡ Purchased by the State with effect from 1st April 1904 and amalgamated with the 3′ 3½″ gauge section of the Eastern Bengal State railway.
(n) Worked by the Jodhpur-Bikaner railway.
(o) Worked by the Rohilkhand and Kumaon Railway Company.
(p) See foot-note (*q*) on page 253.
(q) Worked by the South Indian Railway Company.
(r) Worked by the Bengal and North-Western Railway Company.
(s) See foot-note (*s*) on page 253.
(t) Worked by the Eastern Bengal State railway.
(u) Worked by the Assam-Bengal Railway Company.
(v) Worked by the Assam Railways and Trading Company.
(w) Includes 5·23 miles of Bhavnagar Dock estates and Junagad quarry lines.
(x) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.
(y) Includes 3·93 miles of the Bedi Bandar Dock estate lines.
(z) Worked by the Bengal-Nagpur Railway Company.
§ Purchased by the State with effect from 11th April 1904 and amalgamated with the Tirhoot railway.
‖ Purchased by the State with effect from the 1st July 1904 and amalgamated with the 3′ 3½″ gauge section of the Eastern Bengal State railway.

¶ Made up as follows:—

Open at the commencement of 1904-1905		27,138·09
Opened during 1904-1905		623 49
		27,761·58
Deduct—		
Mileage of the Eastern Bengal State railway between Debiganj and Amchara Ghat abandoned	8·24	
Net decrease due to corrections of mileage	3·26	
		12·50

APPENDIX 40—*contd.*

Lines under construction on 31st March 1905.

		Miles.	Miles.	Miles.
	Eastern Bengal—			
	Kakurgachi Chord	2·25		
	Ranaghat to Lalgola	97·50	99·75	
	Nagda-Muttra (Southern section)—			
	Nagda to the crossing of the Chambal river		141·82	
(i)	North Western—			
	From a point 12 miles south of Quetta to Nushki	82·50		539·44
	Sargoda to Shorkot Road	103·00	240·67	
	Shahdara to Sangla	55·17		
	Oudh and Rohilkhand—			
	Phaphamau to Zafarabad		57·20	
	Ashika-Mangalore		77·27	
	Bengal-Nagpur—			
	Bhojudih to Hariharpur	26·96		
	Bhojudih to Parthadihi	2·28	32·64	
	Malkera to Mobda	3·40		
	East Indian—			
	Mile 170¼ from Howrah on the Jharia branch to Chandore	4·16		
	Tasra siding	1·75		
	Ondal to Salanthia	*44·93		
	Manpur to Dhanbaid	*121·49	279·23	
(ii)	Nagri to Kasunda	1·59		466·51
	Shikohabad to Farukhabad	65·82		
	Khurja to Hapur	*39·49		
	Great Indian Peninsula—			
	Warora to Ballarpur		*37·69	
	Indian Midland—			
	Cawnpore-Collectorgunge branch	6·63	9·87	
	Portion of Agra-Balinganj branch	3·24		
	Madras (North-East line)—			
	Korukkupettai to Basin Road		*0·85	
	Salem-Attur (a)		36·06	
(iii)	Southern Punjab—			
	Ludhiana to MacLeod Ganj			*154·00
(iv)	Petlad-Cambay (Tarapur-Cambay section)—			
	Cambay to Cambay Bandar			1·39
(v)	Eastern Bengal—			
	Kaunia to Bonarpara		44·25	
	Golokganj to the Brahmaputra river opposite Gauhati		151·63	300·67
	Katihar to Godagari		105·00	
	Bellary-Ravadrog		33·00	
	Bengal and North-Western—			
	Company's section—			
	Dharouda to Maharajganj	3·20		
	Sevan to Thawe	17·00		
	Gorakhpur to Bagaha	60·94		
	Barhni (Bahadurganj) to Tulsipur	23·54		
	Gainsari to Jarwa	12·56		
	Tirhoot section—		306·32	
	Bhagalpur to Bhagalpur Ghat	4·80		
	Mansi to Bhaptiahi	60·37		
	Saharsa to Murliganj	18·61		
(vi)	Shikarpur to Bagaha	26·35		703·37
	Bairagnia to Sikrathori	79·55		
	Burma Extensions—			
	Hensada to Kyangin	65·66	186·93	
	Pegu to Martaban	121·27		
	Hospet-Kottur		44·10	
	Nilgiri—			
	Coonoor to Ootacamund		11·50	
	Rajputana-Malwa—			
	Narnaul to Phulera		100·69	
	South Indian—			
	Tiruppachettai to Sivagunga	9·00		
	Madapam to Rameswaram Temple	10·12	20·83	
	Tangeshimadam to Port Amphill	1·71		
(vii)	Tanjore District Board—			
	Arantangi Quarry branch	3·90		
	Adiramptnam Salt sidings	1·00	5·53	
	Thambikkottai Salt Siding	0·63		
(viii)	Rohilkhund and Kumaon—			
	Bareilly to Soron	56·00		
	Moradabad to Ramnagar	47·00	148·00	
	Laiksa to Kashipur	45·00		
(ix)	Jaipur—			
	Sanganer to Siwai-Madhopur			72·85
(x)	Jullundur-Kapurthala-Sultanpur (*British section*)—			
	Jullundur to the British frontier (*b*)			6·80
	Bengal-Nagpur—			
	Jubbulpore-Goodia Extension (2′ 6″)—			
	Nelapur to Mandla	22·67		
	Chhindwara to Burcoole	21·36		
(xi)	Khursadoyi to Sirgora	7·76	273·54	
	Gondia-Chanda (2′ 0″)—			
	Gondia to Chanda (*c*)	158·00		317·33
	Pauni (Brahmapuri) to Nagpur (*c*)	63·75		
	Morappur-Dharmapuri (2′ 6″)		18·36	
	Tiruputtur Krishnagiri (2′ 6″)		25·43	
	Howrah-Amta Light (2′ 0″)—			
	Antpur to Champadanga (*c*)	9·00	12·50	
	Antpur to Rajbulhat (*c*)	3·50		
A	Madura District Light (2′ 6″)—			105·50
	Ammayanayakkanur to Kotagudi	55·00		
	Periyakulam to Krishna Manaik's Tope	5·00	93·00	
	Theni to Saravanath	33·00		
(xii)	Barsi Light (2′ 6″)—			
	Barsi Road Jn. to Pandharpur	30·67	67·37	
	Barsi Town to Tadwala	26·70		
	Dwara-Therria Light (2′ 6″)—			
	Dwara to Maolong (*c*)	13·50	19·50	
B	Maolong to Therria Ghat (*c*)	6·00		214·66
	Shahdara-Saharanpur Tramway (2′ 6″)—			
	Shahdara to Saharanpur	95·00	125·00	
	Baraut to Meerut	30·00		
	Matheran (1′ 0″)—			
	Neral to Matheran		12·79	
	A. Cutch (2′ 6″)—			
	Anjar to Tuna			11·86
	B. Gwalior Light (2′ 0″)—			
(xiii)	Sabulgarh to Shipur			*68·60
	C. Jullundur-Kapurthala-Sultanpur (*Native State section*)—			
	Sultanpur to the British frontier (*c*)			22·02

(*a*) Commencement of work not authorized.
(*b*) Commencement of work not authorized and question of gauge not finally settled.
(*c*) Completion deferred for want of funds.
* Correction of mileage.

And the mileage under construction or sanctioned for construction on the 31st March 1905 will be 3,138·73 miles, made up as follows:—

	Miles.	Miles.	Miles.
5′ 6″ gauge—			
(i) State lines worked by the state		539·44	
(ii) State lines worked by companies		466·51	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms		154·00	
(iv) Native State lines worked by companies		1·39	
			1,161·34
3′ 3¾″ gauge—			
(v) State lines worked by the State		300·87	
(vi) State lines worked by companies		703·37	
(vij) District Boards' lines		5·53	
(viii) Assisted companies' lines subsidized by the Government of India		148·00	
(ix) Native State lines worked by companies		72·85	
			1,230·62
Special (2′ 6″ and 2′ 0″) gauges—			
(x) State lines worked by the State		6·80	
(xi) State lines worked by companies		317·83	
(xii) Assisted companies' lines—			
A. Subsidized by District Boards	105·50		
B. Receiving land only from Government	214·66		
		320·16	
(xiii) Native State lines—			
A. Worked by Native States	11·86		
B. Worked by companies	69·60		
C. Worked by State railway agency	22·02		
		102·48	
			746·77
TOTAL			3,138·73

Making a grand total of railways completed and in hand, at the commencement of 1905-1906 of miles . †30,887·81

And showing, after allowing for lines abandoned and corrections of mileage, an advance on the previous year of miles . . . . . 699·99

† Made up as follows:—

	Miles.
Completed and in hand at the beginning of 1904-1905	30,187·82
Sanctioned during 1904-1905	712·43
	30,900·25
Deduct—	
Mileage of the Eastern Bengal State railway between Debiganj and Anchara Ghat abandoned	5·24
Net decrease due to corrections of mileage	7·20
	12·44
	30,887·81

APPENDIX 40—*concld.*

It is expected that the following lengths of unfinished line will be opened for public traffic in 1905-1906 :—

	Miles.	Miles.	Miles.
5' 6" gauge—			
(i) State lines worked by the State		236·25	
(ii) State lines worked by companies		146·33	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms		154·00	
			536·58
3' 3¾" gauge—			
(iv) State lines worked by the State		99·25	
(v) State lines worked by companies		362·67	
(vi) Assisted companies' lines receiving land only from Government		96·04	
			557·96
Special (2' 6" and 2' 0") gauges—			
(vii) State lines worked by companies		43·79	
TOTAL			1,138·33

Leaving the undermentioned lines for completion in 1906-1907 or later :—

	Miles.	Miles.	Miles.
5' 6" gauge—			
(viii) State lines worked by the State		303·19	
(ix) State lines worked by companies		320·18	
(x) Native State lines worked by companies		1·39	
			624·76
3' 3¾" gauge—			
(xi) State lines worked by the State		201·62	
(xii) State lines worked by companies		223·76	
(xiii) District Boards' lines		5·53	
(xiv) Assisted companies' lines—			
A. Subsidized by the Government of India	148·00		
B. Receiving land only from Government	20·90		
		168·90	
(xv) Native State lines worked by companies		72·85	
			672·66
Special (2' 6" and 2' 0") gauges—			
(xvi) State lines worked by the State		6·80	
(xvii) State lines worked by companies		273·54	
(xviii) Assisted companies' lines—			
A. Subsidized by District Boards	105·50		
B. Receiving land only from Government	214·66		
		320·16	
(xix) Native State lines—			
A. Worked by Native States	11·86		
B. Worked by companies	68·60		
C. Worked by State railway agency	22·02		
		102·48	
			702·98
TOTAL			2,000·40

		Miles.	Miles.	Miles.
(i)	Eastern Bengal—			
	Kakurgachi Chord	2·25	99·75	
	Ranaghat to Laigola	97·50		
	North Western—			236·25
	From a point 12 miles south of Quetta to Nushki	82·50	136·50	
	Sargoda to Chund Bharwana	54·00		
(ii)	Ashikal-Mangalore—			
	Ashikal to Kalnad		45·00	
	Bengal-Nagpur—			
	Bhojudih to Hariharpur	26·96	32·64	
	Bhojudih to Parthadihi	2·28		
	Malkera to Mohuda	3·40		146·33
	East Indian—			
	Shikohabad to Farukhabad		65·82	
	Indian Midland—			
	Cawnpore-Collectorgunge branch	0·63	2·87	
	Portion of the Agra-Balinganj branch	2·24		
(iii)	Southern Punjab—			
	Ludhiana to MacLeod Ganj			154·00
(iv)	Eastern Bengal—			
	Kaunia to Bonarpara		44·25	
	Golakganj to Salmara Road		55·00	99·25
(v)	Bellary-Ryadrug		33·00	
	Hospet-Kottur		41·10	
	Rajputana-Malwa—			
	Narnaul to Phulera		100·69	
	Tirhoot—			362·67
	Mansi to Bhaptiahi	60·37		
	Saharsa to Murliganj	18·61	164·86	
	Shikarpur to Bagaha	26·35		
	Bairagnia to Bikonthori	79·55		
(vi)	Bengal and North-Western—			
	Gorakhpur to Bagaha		60·94	
	Barhni (Bahaduriganj) to Tulsipur		22·54	96·04
	Gainsari to Jarwa		12·56	
(vii)	Moruppur-Dharmapuri (2' 6")		18·36	43·79
	Tirupattur-Krishnagiri (2' 6")		25·43	
(viii)	Nagda-Muttra (Southern section)—			
	Nagda to the crossing of the Chambal river		141·53	
	North Western— ●			
	Chund Bharwana to Shorkot Road	49·00	104·17	303·19
	Shahdara to Sangla	55·17		
	Oudh and Rohilkhand—			
	Phaphamau to Zafarabad		57·50	
(ix)	Ashikal-Mangalore—			
	Kalnad to Mangalore		32·27	
	East Indian—			
	Mile 170½ from Howrah on the Jharia branch to Chandore	4·16		
	Tasra siding	1·75		
	Ondal to Sainthia	44·93	213·41	
	Maupur to Dhanbaid	131·49		320·18
	Nagri to Kusunda	1·59		
	Khurja to Hapur	39·49		
	Great Indian Peninsula—			
	Warora to Bellarpur		37·59	
	Madras (North-East line)—			
	Korukkupettai to Basin Road		0·85	
	Salem-Attur (a)		36·06	
(x)	Petlad-Cambay (Tarapur-Cambay section)—			
	Cambay to Cambay Bandar			1·39
(xi)	Eastern Bengal—			
	Salmara Road to the Brahmaputra river opposite Gauhati		96·62	201·62
	Katihar to Godagari		105·00	
(xii)	Burma Extensions—			
	Henzada to Kyangin	65·66	186·93	
	Pegu to Martaban	121·27		
	Nilgiri—			
	Coonoor to Ootacamund		11·50	
	South Indian—			223·76
	Tiruppachettai to Sivagunga	9·99	20·83	
	Mandapam to Rameswaram Temple	10·12		
	Tangachimadam to Port Amphill	1·71		
	Tirhoot—			
	Bhagalpur to Bhagalpur Ghat		4·50	
(xiii)	Tanjore District Board—			
	Arantangi Quarry branch		3·90	
	Adirampatnam Salt siding		1·00	5·53
	Thanjbikkottai Salt siding		0·63	
(xiv)	A. Rohilkhund and Kumaon—			
	Bareilly to Soron		56·00	
	Moradabad to Ramnagar		47·00	148·00
	Lalkua to Kashipur		45·00	
	B. Bengal and North-Western—			
	Dharonda to Mahrajganj		3·90	20·90
	Sawan to Tbawe		17·00	
(xv)	Jaipur—			
	Sanganer to Siwai-Madhopur			72·85
(xvi)	Jullundur-Kapurthala-Sultanpur (*British section*)—			
	Jullundur to the British Frontier (c)			6·80
(xvii)	Bengal-Nagpur—			
	Jubbulpore-Gondia Extension (2' 6")—			
	Neinpur to Mandla		22·67	
	Chhindwara to Burcoolc		21·36	
	Khurasdeyi to Sirpura		7·76	273·54
	Gondia-Chanda (2' 6")—			
	Gondia to Chanda (a)		159·00	
	Pauni (Brahmapuri) to Nagpur (a)		63·75	
(xviii)	Howrah-Amta Light (2' 0")—			
	Antpur to Champadanga (a)	9·00	12·50	
	Antpur to Rajbulhat (a)	3·50		
	A Madura District Light (2' 6")—			105·50
	Ammayanayakkanur to Kotagudi	55·00	93·00	
	Periyakulam to Krishna Manaik's Tope	5·00		
	Theni to Karuvanath	33·00		
	Barsi Light (2' 6")—			
	Barsi Road Junction to Pandharpur	30·67	57·37	
	Barsi Town to Tadwala	26·70		
	Dwara-Therria Light (2' 6")—			
	Dwara to Maolong (b)	13·50	19·50	
	B Maolong to Therria Ghat (a)	6·00		214·66
	Shahdara-Saharanpur Light (2' 6")—			
	Shahdara to Saharanpur	95·00	125·00	
	Baraut to Meerut	30·00		
	Matheran (2' 0")—			
	Neral to Matheran		12·79	
(xix)	A. Cutch (2' 6")—			
	Anjar to Tuna			11·8
	B. Gwalior Light (2' 0")—			
	Sabalgarh to Shivpur			68·60
	C. Jullundur-Kapurthala-Sultanpur (*Native State section*)—			
	Sultanpur to the British Frontier (c)			22·02

(a) Commencement of work not authorized.
(b) Completion deferred for want of funds.
(c) Commencement of work not authorized and question of gauge not finally settled.

APPENDIX 41.

Construction of feeder lines by Local District Boards from taxes expressly levied for the purpose, and the financing of such lines.

No. 91 R. P.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY PROJECTS.

FROM

MR. C. W. HODSON,
Offg. SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT, RAILWAYS,

To

(*i*) and (*ii*) THE SECRETARIES TO THE GOVERNMENTS OF BOMBAY AND BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

(*iii*) to (*v*) THE SECRETARIES TO THE GOVERNMENTS OF BENGAL, THE UNITED PROVINCES OF AGRA AND OUDH AND THE PUNJAB, PUBLIC WORKS DEPARTMENT.

(*vi*) and (*vii*) THE HONOURABLE THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES AND ASSAM.

(*viii*) THE HONOURABLE THE RESIDENT AT HYDERABAD.

(*ix*) THE HONOURABLE THE RESIDENT IN MYSORE.

(*x*) THE HONOURABLE THE AGENT TO THE GOVERNOR GENERAL AND CHIEF COMMISSIONER OF THE NORTH-WEST FRONTIER PROVINCE.

(*xi*) to (*xiii*) THE HONOURABLE THE AGENTS TO THE GOVERNOR GENERAL FOR CENTRAL INDIA, RAJPUTANA AND BALUCHISTAN.

Dated Simla, the 2nd July 1904.

SIR,

I am directed to forward, for (i) to (v) the information of the Government of Bombay, Bengal, United Provinces, Punjab, Burma, (vi) to (xiii) your information, a copy of a letter* addressed to the Government of Madras on the subject of the grant of loans to District Boards in that Presidency for the purpose of constructing railways.

*No. 12 R. P., dated the 28th January 1903, printed as annexure No. 2 to Appendix C to the Administration Report on the Railways in India for 1903.

APPENDIX 41—*contd.*

In cases where a special cess is levied under section 57, clause (ii), of the Madras Local Boards Act, 1884, the Government of India have expressed their willingness to lend money to the Boards through the Provincial Loan Account, at 4 per cent., the loan being secured by a lien on the entire resources of the Board.

2. The Government of India are now prepared to extend this offer to all District Boards which levy a special cess for the construction of railways. The loans will be granted subject to the conditions enumerated in the letter to the Government of Madras No. 12 R. P., dated the 28th January 1903; and the money will be advanced from the Provincial Loan Account. It must be clearly understood, however, that the Government of India cannot guarantee to provide funds in all cases, or to set apart any definite sum for this purpose. The total amount available in each year will be determined on a consideration of the general financial position; and this sum will be distributed by the Government of India among the various Provinces.

APPENDIX 42.

Adoption on Indian railways of the 5′ 6″ and 3′ 3⅜″ gauges of the standard types of locomotives designed by the English Engineering Standards Committee, and standardization of their component parts.

No. 190 R. S.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY STORES.

FROM

MR. C. W. HODSON,

OFFG. SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT, RAILWAYS,

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS, BOMBAY AND BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE AGENT TO THE GOVERNOR GENERAL, RAJPUTANA.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA, LUCKNOW AND ASSAM.

THE MANAGERS, NORTH-WESTERN, OUDH AND ROHILKHAND, AND EASTERN BENGAL STATE RAILWAYS.

Calcutta, the 6th February 1904.

SIR,

Under cover of Government of India, Public Works Department, Circular No. 18 R. S., dated the 10th January 1902, you were supplied with printed copies of the proceedings of Mr. Wolley-Dod's conference on the subject of the standardization of locomotives for Indian railways which was held in Calcutta during December 1901. Since then further action has been taken in communication with the English and Indian experts with a view to the revision of the existing standard dimensions for Indian railways, and the result of this has been intimated to you by the Government of India in Public Works Department circulars Nos. 1842 and 1843 R.S., dated 21st December 1903.

2. The question of the most suitable standards for locomotives for use both on 5′ 6″ and metre gauge railways in India and of the standardization of their component parts was referred by the Secretary of State to the Engineering Standards Committee convened in England under the auspices of the chief Engineering Institutions, and a copy of their report on the subject has now been forwarded for the information of the Government of India. It adopts five designs of locomotives for use on Indian railways, and appended to the report are instructions to designers as to the component parts of the standard locomotives which have been approved by the Committee.

APPENDIX 42—*contd.*

3. The designs of the locomotives and the standards of component parts have been carefully prepared in communication with the Consulting Engineers of the different Indian Railways and with manufacturers in England, and the Secretary of State considers that they may be accepted by the Government of India as the present standards to be observed as far as possible in all Indents for rolling stock, without further reference to the Conference of Locomotive and Carriage Officers in India. It is understood that the design of locomotives for special work, such as tank engines, shunting engines, etc., will hereafter be further considered, should it appear desirable to do so; meanwhile their component parts would be as far as possible governed by the present instructions to designers.

4. I am directed therefore to forward herewith, for your information and guidance, copy of the report together with the five designs* and instructions to designers and also a tabular statement prepared in this office showing the leading particulars of the engines. The Government of India desire that all railways shall, so far as may be practicable, adopt these standard types in preference to their existing types, whenever they indent for new locomotives whether for renewals or additions. They will however be glad to receive an expression of the opinion of the Government of / your opinion and those of the Railway authorities under your control and of the Railway Administrations under the control thereof / your opinion as regards the types proposed, and as to how far it will be practicable to adopt them.

* Not printed.

Documents accompanying.

Report of the Locomotive Committee on standard locomotives submitted to and approved by the Engineering Standard Committee together with instructions to designers.

Particulars of standard locomotives proposed for Indian Railways by the Standardization Committee.

APPENDIX 42—*contd.*

[Enclosure to letter No. 190 of 6th February 1904.]

Report of the Locomotive Committee on Standard Locomotives for Indian railways submitted to and approved by the Engineering Standards Committee.

The Locomotive Committee beg leave to report that, in accordance with the instructions received through the Engineering Standards Committee from the Secretary of State for India, and with the assistance of a Conference between the Consulting Engineers and Locomotive Manufacturers of the country, they have carefully considered the questions of the most suitable designs of Locomotives for use on the Railways of India, and of the standardization of their component parts.

The five designs* of Locomotives which accompany this Report were prepared in accordance with the instructions laid down by the Conference above referred to, and the designs have been approved by the said Conference, and subsequently by this Committee.

*Government of India, Drawing Branch, Nos. 7966 e to 7966 i. (*Not printed.*)

In each case the weights of the Engine and Tender were first submitted to the Consulting Engineer to the Indian Government, in order to ascertain that the proposed weights did not exceed those permissible under the new Government Rules.

5′ 6″ Gauge.

Taking first the proposed Mail Engine and Tender for the 5′ 6″ gauge, Drawing† No. 1, the boiler has been designed for a working pressure of 180 lbs. per square inch, and with as large a heating surface and grate area as it was found possible to obtain without exceeding the admissible weight.

†Government of India, Drawing Branch, No. 7966 e. (*Not printed*).

The "Belpaire" system of fire-box has been adopted, as it gives more steam and water capacity than the usual arrangement with semi-circular outside shell and girder stays for the inside fire-box, and with increasing pressures and larger fire-boxes the length and weight of girders become excessive, and direct staying has to be resorted to. Most of the new Engines recently designed for English railways are now fitted with "Belpaire" boxes, as well as the new Engines of the Bengal-Nagpur railway, Great Indian Peninsula railway, Madras railway, etc.

The inside cylinder type of Engine was decided on as being that almost universally adopted for the 5′ 6″ gauge lines in India.

It was decided to recommend the use of a balanced slide valve and the "Stephenson" link motion, so that the use of rocking shafts became practically inevitable. It may be mentioned that the latest Mail Engines for the Indian State railways (North Western railway) have this type of cylinder, valve, and motion. They have been running for some time, and are reported to give every satisfaction. It was decided to keep the frames straight throughout, and not to set or splice them at the front end to give clearance for the side-play of the hind bogie wheels. This necessitated a somewhat narrower fire-box than would otherwise have been obtainable.

The wheel diameters were fixed with the view of using tyres identical with those of the largest number of Engines of this type existing in India; certain details, such as the type of brake, smoke box, and the style and position of the reversing gear, not being essential parts of the design, were left to be settled as may be found desirable in each particular case.

Taking next the Goods Engine for 5′ 6″ gauge lines, Drawing‡ No. 2, it will be seen that, as laid down by the Conference, the boiler, cylinders, valve motion, axle-boxes, horn-blocks, etc., are as far as possible identical with corresponding parts of the Mail Engine design, while the wheel diameter was fixed to enable the tyres to duplicate with those of the largest number of Engines of this type existing in India.

‡Government of India, Drawing Branch, No. 7966 f. (*Not printed.*)

APPENDIX 42—*contd.*

METRE GAUGE.

The Mail Engine for metre gauge lines, Drawing*. No. 3, and the Mixed Engine, Drawing† No. 4, have been designed largely on the same lines as the Engines recently adopted on the Bengal and North-Western and the Rohilkhand and Kumaon railways; and it will be seen that, by the adoption of a bogie in front, it has been possible to obtain a very much larger boiler and fire-box than was admissible in the F Class Engines, the weight of which was limited by their having only three axles, while the types now proposed have five axles.

* Government of India, Drawing Branch, No. 7966 g. (*Not printed*).

† Government of India, Drawing Branch, No. 7966 h. (*Not printed*).

For metre gauge lines which have outgrown the O and F Class Engines, it is thought that the designs of Mail and Mixed Traffic Engines will fulfil all their requirements, as the Mixed Traffic Engine is designed to suit goods traffic also, and Engines of similar design are being regularly used on the Bengal and North-Western railway, hauling, it is reported, heavy loads, with success. For metre gauge lines having heavy gradients and heavy traffic the powerful eight-wheel coupled "Mastodon" Engine, Drawing‡ No. 5, has been designed.

‡ Government of India, Drawing Branch, No. 7966 i. (*Not printed.*)

In these Engines the "Belpaire" system of fire-box has been adopted for the same reason as in the case of the 5′ 6″ gauge Engines.

In all the types of Metre Gauge Engines the "Walschaert" valve motion has been adopted as being outside the frames and wheels; it is easily examined and oiled, and it permits the use of the balanced slide valve.

The Committee have not overlooked the preference expressed by the Calcutta Conference for Engines having frames *outside* their wheels, but it should be remembered that when this opinion was expressed no Metre Gauge Engine with frames inside the wheels of modern design was running in India. The difficulties anticipated in the oiling and examination of the *inside* frame Engines have not been found to exist in the new Engines sent to the Bengal and North-Western, and Rohilkhand and Kumaon railways, and the width of the fire-box is only 2″ less than in the outside framed Engine. On the other hand, the advantages gained in reduction of the width between the cylinders, the elimination of the fly crank from Engines of high power, the more effective staying of the frames and reduction of weight in all parts except the boiler, which can thus be made more powerful, are of such importance that the Committee, after full consideration, have adopted the inside frame, which, it may be observed, is very largely used on narrow gauge lines in other countries than India.

In the case of Metre Gauge Engines, Drawing§ Nos. 3 and 4, the ordinary six-wheel Tender, carrying 2,000 gallons of water and four tons of coal, combines very well with the Engine without exceeding the admissible stresses on the bridges; but, in the case of No. 5 type, a special Tender has had to be designed, as shown in Drawing‖ No. 5, in order to avoid the admissible stresses on the bridges being exceeded.

§ Government of India, Drawing Branch, No. 7966 g and h. (*Not printed.*)

‖ Government of India, Drawing Branch, No. 7966 i. (*Not printed.*)

The Instructions to Designers and Findings of the Conference of Consulting Engineers and Locomotive Builders as to the component parts of the Standard Locomotives for Indian railways, having been approved by this Committee, are appended to this Report. (See pages 264-69).

The Committee have received the greatest assistance from the Manufacturers of Indian Locomotives, who are naturally interested in retaining the construction of Locomotives for India in this country. It is hoped that the labours of the Committee may materially help to bring about so desirable an object, and also that, as the result of the careful consideration which has been given to the Committee's proposals by the leading Representatives of Indian Locomotive Design and Construction, much increased economy and efficiency may be realised in the equipment and working of the railways of India.

DOUGLAS FOX,
Chairman.

LESLIE S. ROBERTSON,
Secretary.

APPENDIX 42—*contd.*

The following lists give the names of the gentlemen forming the Locomotive Committee, and the Conference on Indian Locomotives referred to in the Report.

COMMITTEE OF LOCOMOTIVES.

Sir DOUGLAS FOX, *Chairman.*

Sir JOHN WOLFE BARRY, K.C.B.

CAPTAIN NUGENT, R.E.	Representing the War Office.
F. R. UPCOTT, ESQ., C.S.I.	Representing the India Office.
W. SHELFORD, ESQ., C.M.G. G. L. EYLES, ESQ., C.M.G.	Representing the Crown Agents for the Colonies.
JOHN CARRUTHERS, ESQ.	Representing New Zealand and Western Australia.
W. LORIMER, ESQ. (North British Locomotive Co., Ltd.) J. F. ROBINSON, ESQ. (North British Locomotive Co., Ltd.) T. P. REAY, ESQ. (Kitson & Co.)	Nominated by the Locomotive Manufacturers, Parliamentary Association.
W. DEAN, ESQ. (late Great Western railway) J. F. MCINTOSH, ESQ. (Caledonian Railway) F. W. WEBB, ESQ. (London and North-Western railway.)	Nominated by the Railway Companies' Association.
F. W. DICK, ESQ. (Parkgate Steel Co., Rotherham).	Nominated by the Steel Ingot Makers' Association.
F. WOLLEY-DOD, ESQ.	Chairman of the Calcutta Conference.

G. AINSWORTH, ESQ. (Consett Iron Co.).
H. C. ARBUTHNOTT, ESQ. (Taylor Brothers & Co.).
HARTLEY BIBBY, ESQ. (Bibby, Sons & Co., Liverpool).
D. CASSELS, ESQ. (Steel Co. of Scotland).
W. COLLINGWOOD, ESQ. (Vulcan Foundry Co.).
J. M. DOBSON, ESQ. (Hawkshaw & Dobson).
F. C. FAIRHOLME, ESQ. (Cammel & Co.).
EDWARD MARTIN, ESQ. (Guest, Keen & Co.).
EDWARD MILLS, ESQ. (Williams, Foster & Co.).
F. E. ROBERTSON, ESQ., C.I.E. (Sir A. M. Rendel & Co.).
FREDERICK TOMLINSON, ESQ. (Broughton Copper Co.).
SEYMOUR B. TRITTON, ESQ. (Sir A. M. Rendel & Co.).
J. N. VICKERS, ESQ. (Vickers, Son & Maxim).
ROBERT WHITE, ESQ. (Sir George Bruce & White).

LOCOMOTIVE CONFERENCE.

F. E. ROBERTSON, ESQ., *Chairman* (Sir A. M. Rendel & Co.).

J. M. DOBSON, ESQ. (Hawkshaw & Dobson).
BRADFORD LESLIE, ESQ. (A. J. Barry & Leslie).
S. B. TRITTON, ESQ. (Sir A. M. Rendel & Co.).
R. WHITE, ESQ. (Sir George Bruce & White).
H. C. ARBUTHNOTT, ESQ. (Taylor Brothers & Co.).
W. COLLINGWOOD, ESQ. (Vulcan Foundry Co., Ltd.).
G. DOWSON, ESQ. (Beyer, Peacock & Co., Ltd.).
E. GREY, ESQ. (Nasmyth, Wilson & Co., Ltd.)
N. NORMAN, ESQ. (R. Stephenson & Co., Ltd.).
T. P. REAY, ESQ. (Kitson & Co., Ltd.).
J. F. ROBINSON, ESQ. (North British Locomotive Co., Ltd.).

APPENDIX 42 —*contd.*

THE ENGINEERING STANDARDS COMMITTEE.

INSTRUCTIONS TO DESIGNERS AND FINDINGS OF THE CONFERENCE ON STANDARD LOCOMOTIVES FOR INDIAN RAILWAYS.

5′ 6″ Gauge.

Passenger and Goods Engines.

It was resolved:—

1. That the working pressure be 180lbs. per square inch.

2. That the "Belpaire" fire-box be the type recommended, as suggested by the Component Parts Committee, and that the length of the fire-box be 7′ 0″ over all.

3. That the same boiler be used both for the Goods and Passenger Engines.

4. That the telescopic boiler be recommended, and that the largest ring be 4′ 8¼″ diameter outside.

5. That the barrel plates be $\frac{9}{16}$″ thick.

6. That the barrel circumferential joint be single rivetted.

7. That the joints of throat plate, smoke-box tube plate, and longitudinal barrel seams be double rivetted.

8. That the dome be similar to that shown on Messrs. Dubs' drawing for the Eastern Bengal goods engine, C. E.'s No. E. 6858. The vertical seam may be either rivetted or welded.

9. That the safety valves be each 3½″ diameter, and of the Ramsbottom type generally used in India.

10. That the mud collectors and blow-off cocks be similar to that shown on the Eastern Bengal drawing E. 6858. (*Not printed.*)

11. That the fire-box casing front vertical joint be double rivetted.

12. That the fire-box casing back vertical joint be single rivetted.

13. That all the fire-box casing plates be $\frac{9}{16}$″ thick, except the throat plate, which will be $\frac{5}{8}$″ thick.

14. That the centre longitudinal stays be jointed—*vide* latest E. I. R. design.*

* Government of India, Drawing Branch, No. 7966 a. (*Not printed*).

15. That the angle iron for the expansion bracket be 6″ × 3½″.

16. That the fire-box plates be of copper.

17. That the tube plate be 1″ thick where the tubes pass through it, and reduced to $\frac{9}{16}$″ below this. All other plates to be $\frac{9}{16}$″ thick.

18. That the side stays be of copper or other approved material.

19. That they be screwed 12 threads to the inch.

20. That they be 1″ diameter.

21. That they be spaced not more than 4″ apart.

22. That the expansion roof stays be similar to the G.I.P. engine as shown, or similar to the Madras engine;† either arrangements may be adopted.

† Government of India, Drawing Branch No. 7966 b. (*Not printed*).

23. That the arrangement of the cross stays may be that adopted on the G. I. P.,‡ or that adopted on the Madras engine.

‡ Government of India, Drawing Branch, No. 7966 c and d. (*Not printed*).

24. That the external diameter of the boiler tubes be 1¾″, reduced to 1⅝″ in the fire-box tube plate, and enlarged at the front tube plate as necessary.

APPENDIX 42—*contd.*

25. That for a length of 12″ next the fire-box the tubes have a thickness of 11 S. W. G. and that they then taper to 13 S. W. G. in a length of 12″ ; the remainder of the length to be 13 S. W. G.

26. That the minimum bridge between tube holes in the copper tube plate be $\frac{3}{4}$″.

26A. That the minimum water space between tubes be $\frac{3}{4}$″.

27. That the ferrules have a taper of 1 in 20, and a thickness of 10 S. W. G.

28. That if circular or oval fire holes be adopted, the casing and fire-box plates may be flanged outwards without a ring if desired.

29. That if the fire holes be of rectangular shape, a thin ring be used, and the copper plate be dished outwards to meet it.

30. That the foundation ring be 3″ thick.

31. That the rivetting at the corners be double ; the remainder may be either double or single.

32. That the foundation ring may be either a forging or a steel casting.

33. That no instructions be given as to the smoke-box, chimney, or regulator.

34. That where possible, all boiler fittings be fitted on to flat seatings, rivetted to the boiler shell.

35. That the length of boiler barrel between tube plates be 11′ 4$\frac{1}{2}$″.

36. That the length of fire-box be left open.

37. That the number of square feet of grate surface be as great as possible compatible with the weight at the designer's disposal, grate surface being given preference to tube length.

38. That the wash-out plugs be 1$\frac{1}{2}$″ diameter at the point, with a taper of 1 in 8, and screwed 12 threads to the inch.

39. That the frame plates be 1$\frac{1}{2}$″ thick if the weight will permit of it, but that in any case the minimum thickness be an inch and a sixteenth.

40. That both cylinders be cast in one casting.

41. That the diameter be 18″ to 18$\frac{1}{2}$″ according to the amount of heating surface which the designers are able to work in.

42. That the stroke be 26″.

43. That balanced valves be used.

44. That there be loose covers at both ends of the cylinders, one large and one small.

45. That the piston be of cast iron.

46. That the piston rings be of cast iron $\frac{7}{8}$″ wide on face.

47. That the piston rod and cross-head be separate.

48. That the piston rod have a taper of 1 in 6 at the piston end, and a taper of 1 in 12 at the cross-head end.

49. That the connecting rod have straps at both ends.

50. That the coupling rods of six-coupled engines be bushed at the knuckle joint, but not case-hardened. The coupling rods to be of the same quality of steel as the connecting rods.

51. That the eccentric straps be made of cast iron.

52. That the valve motion be the Stephenson link motion.

53. That the reversing gear be preferably screw, but that a suitable steam reversing gear be kept in mind when the design is being got out.

54. That the position of the reversing gear be decided by the special circumstances of each railway.

55. That there be four slide bars to each cylinder.

56. That the wheel centres be of cast steel, with the balance weights cast solid.

APPENDIX 42—*contd.*

57. That 3″ tyres be used both for the Passenger and goods engines.

58. That for the Passenger Engine the coupled wheels be 5′ 8″ diameter of centre and 6′ 2″ diameter on tread, with 3″ tyres. For the Goods Engine, 4′ 7½″ diameter of centre and 5′ 1½″ diameter on tread, with 3″ tyres.

59. That the method of attaching the tyres to the wheel's centre be that known as "the stud and lip fastening."

60. That the crank webs have swelled in preference to straight sides.

61. That clearance room be left, when working out the design, for the crank axle to be hcoped if it be so desired.

62. That the crank-pin end washer securing the side rod be screwed, not merely secured by a taper pin.

63. That the axle-boxes of the coupled axle be of solid bronze, fitted with white metal at the bearings.

64. That the axle-box guides of the coupled axles be steel castings with the wedge placed in front.

65. That the bearing springs for driving wheels only may be helical.

66. That for laminated springs the mode of attachment be that known as the "underhung method."

67. That the steam brake may be used on engine and tender in combination with the automatic vacuum brake fittings on engine to enable the vacuum brake to be applied on the train simultaneously with engine; or the vacuum brake alone may be used.

68. That no special form of brake block be recommended, the Conference being divided as to the merits of flanged or unflanged brake blocks.

69. That for both Passenger and Goods Engines the cab be over the engine alone, with sliding shutters at the sides, but that no cab be provided on the tender; but tender cab to be kept in view in design for those lines in India which specially require it.

70. That no recommendation be made as to type of buffer beam.

71. That the buffers be either the Indian State (E. B. S. R.) pattern or G. I. P. pattern, and that all heads be convex.

72. That no recommendations be made for the draw-bar gear, but the I. S. R. standard to be generally followed.

73. That the type of the drag-box be left to the designers to work in according to weight available, but castings, either steel or iron, to be used in preference to a built-up design of angles and plates.

74. That the intermediate draw gear between engine and tender be the Indian State mail pattern.

Tender.

75. That the tender be of the type used on the G. I. P. mail engine, strengthened where necessary.

76. That the tender frame be, if possible, similar to that used with the Eastern Bengal mail engine.

77. That the water connections be rubber fittings.

78. That the wheels for the tender have 3′ 1″ centres, with 3″ tyres, and be 3′ 7″ on tread, and that the same size of wheel be used both for the Passenger Engine bogie and tender.

79. That the journal be 10″ × 5½″.

80. That the wheel seat be 6¾″ diameter.

81. That the springs be of plates 4½″ wide.

82. That the axle-boxes and guides be of cast iron, with door of former as large as possible.

83. That the middle box have flat sliding plate.

84. That the bearings be of gun metal bushed with white metal.

85. That the brake be of the same type as that used on the engine.

APPENDIX 42—*contd.*

MAIL ENGINE.

86. That the bogie for Passenger Engines be either of the sliding type adopted on the North-Western of India, or of the double swing link type adopted on the Great Indian Peninsula.

87. That the cylinders be 18½" diameter with 26" stroke, and that in other details they be the same as those employed for the Goods Engine, so as to profit by the advantages gained by duplication.

METRE GAUGE ENGINES.

That the engines for Passenger and Mixed Traffic be similar to that used on the Bengal and North-Western railway for Mixed Traffic, having frames inside the wheels and Walschaert valve gear; and that a Heavy Goods Engine, having eight wheels coupled, with leading four-wheel bogie, be recommended.

1. That the working pressure be 180 lbs. per square inch.

2. That the "Belpaire" fire-box be used.

3. That the boilers for the Passenger and Mixed Traffic Engines shall duplicate with one another.

4. That the telescopic boiler be recommended, and that the largest ring be 3' 10½" diameter outside for the Passenger and Mixed Traffic Engines.

5. That the barrel plates be ½" thick.

6. That the barrel circumferential joint be single rivetted.

7. That the joints of throat plate, smoke-box, tube plate, and longitudinal barrel seams be double rivetted.

8. Nil.

9. That the safety valves be each 2½" diameter, and of the Ramsbottom type generally used in India.

10. That the mud collectors and blow-off cocks be similar to those of the "F" Class engines.

11. That the fire-box casing front vertical joint be double rivetted.

12. That the fire-box casing back vertical joint be single rivetted.

13. That all the fire-box casing plates be $\frac{7}{16}$" thick, except the throat plates, which will be $\frac{7}{32}$" thick.

14. That the centre longitudinal stays be jointed under the dome.

15. That the angle iron for the expansion bracket be not more than 6" deep.

16. That the fire-box plates be of copper.

17. That the tube plate be ¾" thick where the tubes pass through it, and reduced to ½" below this. All other plates to be ½" thick.

18. That the side stays be of copper or other approved material.

19. That they be screwed 12 threads to the inch.

20. That they be 1" diameter.

21. That they be spaced not more than 4" apart.

22. That the expansion roof stays be similar to those adopted for the broad gauge.

23. That the cross stays be either screwed into the side plates with nuts, or attached to brackets rivetted to the side plates.

24. That the external diameter of the boiler tubes be 1¾", reduced to 1⅝" in the fire-box tube plate, and enlarged at the front tube plate as necessary.

25. That for a length of 12" next the fire-box the tubes have a thickness of 11 S. W. G., and that they then taper to 13 S. W. G. in a length of 12"; remainder of length to be 13 S. W. G. thick.

26. That the minimum bridge between tube holes in the copper tube plate be ¾".

APPENDIX 42—*contd.*

26A. That the minimum water space between tubes be $\frac{5}{8}$".

27. That the ferrules have taper of 1 in 20, and a thickness of 10 S. W. G.

28. That if circular or oval fire holes be adopted, the casing and fire-box plates may be flanged outwards without a ring if desired.

29. That if the fire holes be of rectangular shape, a thin ring be used, and the copper plate be dished outwards to meet it.

30. That the foundation ring be 2" thick.

31. That the rivetting at the corners be double; the remainder may be single.

32. That the foundation ring may be either a forging or a steel casting.

33. That no instructions be given as to the smoke-box, chimney, or regulator.

34. That, where possible, all boiler fittings be fitted on to flat seatings rivetted to the boiler shell.

35. That the length of boiler barrel between tube plates be 11′ 9″ for the Passenger and Mixed Traffic Engines.

36. That the length of fire-box be left open.

37. That the number of square feet of grate surface be as great as possible compatible with the weight at the designer's disposal, grate surface being given preference to tube length.

38. That the wash-out plugs be $1\frac{1}{2}$" diameter at the point, with a taper of 1 in 8, and screwed 12 threads to the inch.

39. That the frame plates be not less than $\frac{7}{8}$" thick, and placed inside the wheels.

40. That the cylinders be cast separately.

41. That the diameter of the cylinders for the Passenger Engine be $15\frac{1}{2}$", for the Mixed Engine 15", and for the Heavy Goods Engine 16".

42. That the stroke be 22" for all three types.

43. That balanced valves be used.

44. That there be loose covers at both ends of the cylinders, one large and one small.

45. That the piston be of cast iron.

46. That the piston rings be of cast iron $\frac{3}{4}$" wide on face.

47. That the piston rod and cross-head be separate.

48. That the piston rod have taper of 1 in 6 at the piston end, and a taper of 1 in 12 at the cross-head end.

49. That the connecting rod have a strap at the large end only.

50. That the coupling rods be bushed at the knuckle joint but not case-hardened.

The coupling rods to be of the same quality of steel as the connecting rods.

51. Nil.

52. That the Walschaert gear be used.

53. That reversing gear be preferably of the screw type.

54. That the reversing gear be on the right-hand side unless otherwise specified.

55. That there be two slide bars to each cylinder.

56. That the wheel centres be of cast steel, with the balance weights cast solid.

57. That $2\frac{1}{2}$" tyres be used on the coupled wheels.

58. That for the Passenger Engine the coupled wheels be 4′ 4″ diameter of centre and 4′ 9″ diameter of tread, with $2\frac{1}{2}$" tyres. For the Mixed Traffic Engine, 3′ 7″ diameter of centre and 4′ diameter on tread, with $2\frac{1}{2}$" tyres.

APPENDIX 42—*contd.*

For the Heavy Goods Traffic Engine, 3′ 2″ diameter of centre and 3′ 7″ diameter on tread, with 2½″ tyres.

59. That the method of attaching the tyres to the wheel centres be that known as "the stud and lip fastening."

60. Nil.

61. Nil.

62. That the crank-pin end washer securing the side rod be screwed, not merely secured by a taper pin.

63. That the axle-boxes of the coupled axles be of solid bronze, fitted with white metal at the bearings.

64. That the axle-box guides of the coupled axles be steel castings with the wedge placed in front.

65. That the bearing springs, for the Passenger and Mixed Traffic Engines for driving wheels only may be helical.

66. That for laminated springs the mode of attachment be that known as "the underhung method."

67. That the Conference recommend that the vacuum brake be fitted on all engines and tenders. The standard sizes of brake cylinders be 15″ on the engine and 12″ on the tender. A pair of cylinders to be employed in each case.

68. That no special form of brake block be recommended, the Conference being divided as to the merits of flanged or unflanged brake blocks.

69. That a cab be fitted to both tender and engine of all classes.

69A. That the leading tyres of the Heavy Goods Engine be blind.

70. That no recommendation be made as to type of buffer beam.

71. That the buffers be the I. S. R. standard pattern with spiral springs.

72. That the draw-bar gear be the I. S. R. standard pattern with spiral springs.

73. That the type of the drag-box be left to the designers to work in accordance to weight available, but castings, either steel or iron, to be used in preference to a built-up design of angles and plates.

74. That the intermediate draw gear between engine and tender be the Indian State pattern, *viz.*, with laminated spring and side buffers.

74A. That the bogie be either of the sliding or of the double swing link type.

TENDER.

75. That the tender for the Passenger and Mixed Traffic Engines be of the type shown on Drawing No. 11; and that for the Heavy Goods Engine a bogie tender of new design be made, to comply with the Government rules.

76. That the thickness of the tender frame be ⅝″.

77. That the water connections be rubber fittings.

78. That the wheels for the tender have 2′ 0″ centres, with 2½″ tyres, and be 2′ 4½″ on tread; and that the same size of wheel be used for Passenger, Mixed, and Heavy Goods Engine bogies.

79. That the journal be 8″ × 4″.

80. That the wheel seat be 5½″ diameter.

81. That the springs be of plates 3½″ wide.

82. That the axle-boxes and guides be of cast iron, with door of former as large as possible.

83. That the middle box of the six-wheeled tender have flat sliding plate.

84. That the bearings be of gun metal bushed with white metal.

85. Nil.

86. Nil.

87. Nil.

PARTICULARS OF STANDARD LOCOMOTIVES PROPOSED FOR INDIAN RAILWAYS.

BY THE STANDARDIZATION COMMITTEE.

Railway	Serial No.	Class.	Cylinders. Diameter. Inches.	Cylinders. Stroke. Inches.	Cylinders. Volume of two cylinders. Cub. ft.	Wheels. Coupled. No.	Wheels. Coupled. Diameter. Inches.	Weight. On drivers. Tons.	Weight. Total. Tons.	Boiler pressure. lbs.	Heating surface. Tubes. Sq. ft.	Heating surface. Fire box. Sq. ft.	Heating surface. Total. Sq. ft.	Grate area. Sq. ft.	Weight of engine and tender. Full. Tons.	Weight of engine and tender. Empty. Tons.	Tractive force. Per lb. m. e. p. $\frac{d^2 s}{D}$ lbs.	Tractive force. At ¾ Boiler pressure. 75 P x t. lbs.	Tractive force. At ¼ adhesive W / 4 lbs.	Piston speed per minute. at 10 miles per hour. feet.	Indicated Horse power.	Ratios. G / V	Ratios. H / V	Ratios. H / G	Ratios. H b / H	Ratios. G / Area through tubes.	Ratios. 100 t. / G.	Ratios. T / W	Ratios. W / 4 t.
			d.	s.	V.		D.	W.		P.	H. t.	H. b.	H.	G.			t.	T.											
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	23	23	24	25	26	27	28	29	30
																										5 ft. 6 in. Gauge.			
Indian State Railways.	1	4-4-0	18½	26	8·09	4	74	31·50	50·00	180	1,258·90	130·90	1,385·80	26·00	89·35	...	120·25	16,234	17,040	196·7	...	3·21	171·3	53·3	·0938	8·67	462·5	515	146·7
	2	0-6-0	18½	26	8·09	6	61½	46·90	46·80	180	1,255·80	130·00	1,385·80	26·00	86·15	...	144·70	19,535	20,302	236·8	...	3·21	171·3	53·3	·0938	8·67	556·5	417	181·1
																										3 ft. 3⅜ in. Gauge.			
	3	4-6-0	15½	22	4·80	6	57	25·50	33·00	180	954·00	108·00	1,062·00	16·00	56·00	...	93·72	12,517	14,280	216·2	...	3·33	221·3	66·4	·1017	7·08	579·5	491	154·0
	4	4-6-0	15	22	4·50	6	48	25·20	32·50	180	954·00	108·00	1,062·00	16·00	55·50	...	103·12	13,921	14,112	256·7	...	3·56	230·0	66·4	·1017	7·08	644·5	553	136·9
	5	4-8-0 (Mastodon).	16	22	5·12	8	42½	31·00	39·00	180	1,161·00	126·70	1,287·70	17·60	63·00	...	132·51	17,889	17,360	290·0	...	3·44	251·5	73·2	·0984	6·40	752·9	577	131·0

APPENDIX 43.

Measures for the comfort and convenience of 3rd class passengers.

No. 245 R. T.

RAILWAY BOARD.

To

THE MANAGERS, NORTH WESTERN, OUDH AND ROHILKHAND, EASTERN BENGAL (STATE), JODHPUR-BIKANER AND UDAIPUR-CHITOR RAILWAYS.

THE AGENTS, EAST INDIAN, GREAT INDIAN PENINSULA, BOMBAY, BARODA AND CENTRAL INDIA, BENGAL AND NORTH-WESTERN, SOUTHERN MAHRATTA, SOUTH INDIAN, ASSAM-BENGAL AND BURMA RAILWAYS.

THE AGENTS AND CHIEF ENGINEERS, BENGAL-NAGPUR, BENGAL CENTRAL, ROHILKHUND AND KUMAON AND KALKA-SIMLA RAILWAYS.

THE AGENTS AND MANAGERS, MADRAS RAILWAY AND THE NIZAM'S GUARANTEED STATE RAILWAYS.

THE AGENT AND GENERAL MANAGER, DIBRU-SADIYA RAILWAY.

THE MANAGER AND ENGINEER-IN-CHIEF, BHAVNAGAR-GONDAL-JUNAGADH-PORBANDAR RAILWAY.

THE GENERAL MANAGER AND CHIEF ENGINEER, DARJEELING-HIMALAYAN RAILWAY.

THE MANAGER AND EXECUTIVE ENGINEER, MORVI RAILWAY.

THE MANAGER AND CHIEF ENGINEER, BENGAL DOOARS RAILWAY.

THE RESIDENT ENGINEER AND AGENT, BARSI LIGHT RAILWAY.

Calcutta, the 22nd March 1905.

MEMORANDUM.

The Railway Board desire to call the attention of the several Railway Administrations to the following matters for which early provision should be made:—

(1) Facilities for passengers to obtain their tickets a longer time before the departure of the trains than they are at present able to do.

(2) Facilities for examining tickets of 3rd class passengers, both at starting and road-side stations as will enable the passengers to have proper access to the platforms and take their seats in the train without the crush which now too frequently occurs.

(3) Carriage accommodation for 3rd class passengers to prevent the over-crowding, which at present is much too general.

The Board have thought it better to call the attention of Railway Administrations to these matters in a general way in preference to issuing specific regulations on the subject, and it is hoped that they will respond to the Board's wishes to the very best of their abilities in order to avoid what is at the present time a considerable hardship upon the passengers referred to. The Board will be glad to receive your assurance that substantial improvement will at once be made in each of the matters complained of.

ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR THE

Calendar year 1905

THE RAILWAY BOARD.

Dated the 23rd May 1906.

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9-7 Rom

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INDIAN RAILWAYS.

Diagram showing for each year the totals up to 31st December 1908 for Capital outlay, Gross earnings, Working expenses, and length in Miles open, also percentage of Net earnings on Capital outlay and percentage of Working expenses to Gross earnings.

The figures on this scale represent lakhs for the Capital outlay, tens of thousands for Gross earnings and Working expenses and Miles for Length open.

In the case of percentage of Net earnings on Capital outlay, and percentage of Working expenses to Gross earnings, each square represents one and two per cent. respectively.

The decrease in the Total Capital outlay in 1903 is due to revision of the outlay hitherto adopted for lines purchased by the State from Guaranteed Railway Companies.

Litho. S. I. O., Calcutta.

RAILWAY SYSTEM OF INDIA

Corrected up to 30th April 1900.

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ADMINISTRATION REPORT

ON THE

RAILWAYS IN INDIA

FOR

THE CALENDAR YEAR 1905.

General.

The Railway Board have in this report re-introduced, with certain modifications, Appendix 12, showing the general results of working each railway system, which last appeared in the report for 1903. Appendix 38—History of open lines, and of lines under construction or sanctioned for commencement, has been curtailed, certain details of no particular interest having been omitted.

Mileage.

2. During the year 1905, 749 miles of line were opened to traffic, bringing the total mileage open up to 28,295 miles of the following gauges :—

15,028	of	5′ 6″	gauge	(standard).
11,959	„	3′ 3⅜″	„	(metre).
980	„	2′ 6″	„	(special).
328	„	2′ 0″	„	
28,295				

There were 627 miles of line sanctioned during the year—

371	of	5′ 6″	gauge	(standard).
139	„	3′ 3⅜″	„	(metre).
117	„	2′ 6″	„	(special).
...	„	2′ 0″	„	
627				

Up to the latest date of returns (end of April 1906) the mileages are—

Lines open	28,617
Lines under construction and sanctioned	3,297

Capital.

3. The Capital outlay from the commencement on open lines and lines partly open amounted at the close of the calendar year 1905 to Rs. 36,693·94 lakhs, and that on lines wholly under construction to Rs. 267·22 lakhs. In addition Rs. 95·17 lakhs were incurred on miscellaneous items (English stores, etc.) connected with railways. The total outlay amounted to Rs. 37,056·33.

4. All sanctions for expenditure are given with reference to the official year, and the sum of Rs. 1,500 lakhs (£ 10,000,000), being an increase of 20 per cent. on the previous year, has been provided for 1906-1907 divided as under :—

	Rs. Lakhs.
(*a*) For open lines, including Rs. 382 lakhs for rolling-stock	891·09
(*b*) For lines already under construction—	
(i) begun prior to 1905-1906	380·54
(ii) begun during 1905-1906	158·37
(*c*) For lines to be begun in 1906-1907	70·00
TOTAL	15,00·00

Rolling-stock and safety appliances.

5. In 1905, 256 engines, 370 coaches and 2,861 wagons were added to the rolling-stock of the railways, and there are under supply 511 engines, 2,223 coaches and 6,700 wagons.

Subsequent to the 31st December 1905 the provision of 47 engines, 75 coaches and 2,248 wagons has, in addition, been authorized.

6. Three hundred and eighty-six engines, 800 coaches and 915 wagons were fitted with automatic brakes, bringing the number so fitted at the close of the year up to 3,016 engines, 11,201 coaches and 3,798 wagons, as against 2,799 engines, 9,061 coaches and 107,226 wagons not fitted.

7. Five hundred and sixty vehicles were fitted with gas and electricity, making the total number so fitted at the close of the year 10,430, as compared with 7,408 not fitted. The number fitted with gas was 9,782 and with electricity 648.

8. Means of communication between passengers, guards and drivers are fitted to many fast trains, both State and Company, and their more extended use is being pressed on all lines.

9. One hundred and eighty stations were fitted with apparatus for interlocking points and signals. The progress in the introduction of automatic instruments for signalling trains between stations continues, 79 stations having been provided with these instruments.

Statistical results of working.

10. With an addition of 749 miles to the open mileage, the gross earnings of all Indian railways during the calendar year 1905 amounted in round figures to Rs. 4,168·09 lakhs, compared with Rs. 3,964·97 lakhs in 1904, an increase of Rs. 203·12 lakhs. Of the increase in the gross earnings, Rs. 116·50 lakhs were absorbed in additional working expenses. The net earnings amounted to Rs. 2,174·09 lakhs, against Rs. 2,087·47 lakhs in 1904, or an increase of Rs. 86·62 lakhs. These net earnings yielded a return on the Capital outlay (Rs. 36,693·94 lakhs) on open lines and lines partly open of nearly 6 per cent., about the same as that yielded in 1904.

Of the increase of Rs. 203·12 lakhs in the gross receipts, the Bengal-Nagpur railway earned Rs. 55·59 lakhs or 27 per cent., the Rajputana-Malwa railway Rs. 51·91 lakhs or 26 per cent., and the remainder was contributed principally by the Great Indian Peninsula, Bombay, Baroda and Central India and Madras railways.

The development of passenger traffic, noticed in the last report, continued during the year under review, and a larger number of pilgrims, native marriage parties, visitors to fairs, etc., were carried by railway. The visit to India of Their Royal Highnesses the Prince and Princess of Wales also contributed to this development. The total number carried was 248·16 millions against 227·10 millions, and the earnings therefrom Rs. 1,273·83 lakhs against Rs. 1,176·20 lakhs. The number of third class passengers carried was more by 18·76 millions and the earnings therefrom by Rs. 79·13 lakhs. The other classes also showed satisfactory increases. Of the increase of Rs. 97·63 lakhs in the passenger receipts, the North Western (State) railway earned Rs. 19·99 lakhs or 20 per cent., and the remainder was contributed principally by the Great Indian Peninsula, Rajputana-Malwa, Bengal-Nagpur and Bombay, Baroda and Central India railways.

The average rate charged to passengers of all classes was 2·47 pies per mile, just over $\frac{1}{3}$th of a penny, and the average distance travelled was about 40 miles. There have been no material fluctuations in these figures since 1884.

The aggregate tonnage of goods lifted during the year 1905 and the earnings therefrom were 54·94 million tons and Rs. 2,620·71 lakhs, respectively, an improvement over the previous year of 2·89 million tons and Rs. 101·90 lakhs. Of the increase in the goods receipts the Bengal-Nagpur railway earned Rs. 47·02 lakhs or 46 per cent., the Rajputana-Malwa railway earned Rs. 38·47 lakhs or 38 per cent., and the remainder was contributed principally by the Great Indian Peninsula, Madras, and Bombay, Baroda and Central India railways.

The total weight of the traffic in "Grain and pulse", "Cotton, raw and manufactured", "Coal", "Oil-seeds", "Sugar", "Salt", and "Jute" during the year

1905 amounted to 28·78 million tons and the earnings therefrom to Rs. 1,712·68 lakhs, against 27·77 million tons and Rs. 1,689·81 lakhs, respectively, in the previous year. The traffic in these commodities amounted during the year 1905 to 70·63 per cent. in weight and 70·13 per cent. in earnings of the total traffic carried for the public, against 71·37 per cent. and 71·58 per cent., respectively, in the previous year.

There was a large increase of 1·61 million tons and Rs. 101·06 lakhs in the grain and pulse (other than wheat) traffic, attributable chiefly to the larger movements of grains owing to scarcity prevailing in Southern India and Rajputana. There was also an increase of 244·81 thousand tons and Rs. 53·68 lakhs under cotton, due to good crops. There was, however, a falling off of 1·07 million tons and Rs. 114·28 lakhs in the wheat traffic, and of 199·50 thousand tons and 19·47 lakhs in the rape and mustard seed traffic, due to the partial failure of crops up-country in consequence of an unusually cold and wet season in the beginning of 1905.

Coal.—During the year 1905 the total output from the collieries in India and Burma amounted, as shown in Appendix 28, to 8·43 million tons, against 8·22 million tons in 1904. The exports of Indian coal to Indian ports, principally Calcutta to Bombay, Karachi and Madras, rose from 1·45 million tons to 1·64 million tons or by 190 thousand tons, and those to ports outside India including Burma, principally Calcutta to Rangoon and Ceylon, from 896·88 thousand tons to 1,144·68 thousand tons or by 247·80 thousand tons. The imports of coal from the United Kingdom decreased from 174·70 thousand tons to 147·73 thousand tons or by 26·97 thousand tons, and those from other countries from 79·17 thousand tons to 50·02 thousand tons or by 29·15 thousand tons.

The total quantity of Indian coal consumed by railways during the year 1905 increased, as shown in Appendix 27, from 2·45 million tons to 2·67 million tons or by 220 thousand tons, and the amount of foreign coal consumed from 17·43 thousand tons to 18·23 thousand tons.

The improvement in the traffic in coal carried by railways was due principally to the increase of 245·76 thousand tons and Rs. 19·87 lakhs recorded by the Bengal-Nagpur railway, owing to the traffic from the Sanctoria and Jherriah coal-fields having been carried *vid* the Adra-Khargpur route, instead of *vid* Asansol, to Calcutta for shipment. On the East Indian railway the quantity carried increased by 169·80 thousand tons and the earnings by Rs. 10·57 lakhs, due to larger despatches for foreign railways and for private factories.

The average rate for all descriptions of goods carried per ton per mile, *viz.*, $5\frac{1}{4}$ pies, or just under $\frac{1}{2}$ penny, was the lowest recorded since 1884, in which year the rate was $7\frac{1}{4}$ pies; while the average distance over which a ton of goods was carried, *viz.*, 177 miles, was the highest.

The additional mileage worked, the larger traffic handled and the increase in the train-mileage run necessitated a corresponding increase in the working expenses, and although large sums were expended by the principal railways in renewing their permanent-way and rolling-stock, and in strengthening bridges, the railways were worked during 1905 at a slightly higher percentage of gross earnings, *viz.*, $47\frac{3}{4}$, against $47\frac{1}{4}$ per cent. in the previous year.

Financial results to the State.

11. The financial result of the working of the State and Guaranteed railways for the year 1905 was a net gain to the State of 263·85 lakhs of rupees, the largest yet obtained in any year, after meeting, in addition to the expenses of working, all charges for interest on Capital outlay by the State and on Capital raised by Companies, and also the annuity payments for railways purchased by the State, including both interest and the portion that represents redemption of Capital. This is the sixth year in succession in which there has been a surplus.

In the subjoined table, which gives details of the charges against Revenue for the year 1905 in comparison with the two preceding years, the ordinary interest charges are first deducted, and, on this basis, *i.e.*, after excluding the portion of the annuity payments representing redemption of Capital, Rs. 98·28 lakhs, the surplus to the State for the year 1905 amounts to Rs. 362·13 lakhs. It is to be noted that even this understates the real surplus derived from the railways open to traffic, as the

interest charges include the interest on outlay on lines under construction, which, if these lines were being constructed by private enterprise, would be charged to the Capital account.

The results for the two old Guaranteed railways, the Bombay, Baroda and Central India and the Madras railways, are shown in a separate column in this table, in order to bring out the unfavourable effect to the State of the higher rate of guaranteed interest (5 per cent.) paid on nearly the whole Share Capital of these lines. On these two railways taken together there was a net loss to the State of over 25 lakhs of rupees, the loss on the Madras railway being nearly 32 lakhs, while there was a surplus of over 7 lakhs on the Bombay, Baroda and Central India railway.

	1903.			1904.			1905.		
	State railways.	Guaranteed railways. (*Madras and Bombay, Baroda and Central India.*)	Total.	State railways.	Guaranteed railways. (*Madras and Bombay, Baroda and Central India.*)	Total.	State railways.	Guaranteed railways. (*Madras and Bombay, Baroda and Central India.*)	Total.
REVENUE.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross traffic receipts.—State railways	29,80,67,796	...	29,80,67,796	32,91,95,009	...	32,91,95,009	34,40,06,309	...	34,40,06,309
Gross traffic earnings.—Guaranteed railways	...	2,96,84,050	2,96,84,050	...	3,15,88,927	3,15,88,927	...	3,33,99,021	3,33,99,021
Repayment of advances of interest.—Subsidized railways	6,24,961	...	6,24,961	7,22,765	...	7,22,765	6,41,787	...	6,41,787
TOTAL REVENUE	29,86,92,757	2,96,84,050	32,82,76,807	32,99,17,774	3,15,88,927	36,15,06,701	34,46,50,096	3,33,99,021	37,79,49,117
EXPENDITURE.									
Working Expenses.—State railways	14,07,14,217	...	14,07,14,217	15,45,20,716	...	15,45,20,716	16,62,00,309	...	16,62,00,309
Working expenses.—Guaranteed railways	...	1,55,20,995	1,55,20,995	...	1,59,28,480	1,59,28,480	...	1,65,39,840	1,65,39,840
Share of surplus profits paid to Companies.—Guaranteed railways	...	15,12,518	15,12,518	...	18,91,136	18,91,136	...	26,03,049	26,03,049
Share of surplus profits paid to Companies.—State railways	40,20,925	...	40,20,925	52,91,851	...	52,91,851	55,20,776	...	55,20,776
Land and Supervision charges.—Guaranteed railways	...	—*1,790*	—*1,790*	...	—*1,18,321*	—*1,18,321*	...	5,86,466	5,86,466
Land and subsidy charges—	3,04,446	...	3,04,446	7,58,615	...	7,58,615	4,51,931	...	4,51,931
Miscellaneous railway expenditure—	10,07,603	...	10,07,603	8,73,905	...	8,73,905	—2,43,051	...	—2,43,051
Total expenditure	14,60,47,191	1,70,31,713	16,30,78,904	16,14,45,087	1,77,01,295	17,91,46,382	17,19,30,055	1,97,29,355	19,16,59,410
Net Revenue	15,26,45,566	1,25,52,337	16,51,97,903	16,84,72,687	1,38,87,632	18,23,60,319	17,27,20,041	1,35,69,666	18,62,89,707
ORDINARY INTEREST CHARGES.									
Interest on Capital outlay.—State Railways	4,92,56,942	...	4,92,56,942	5,17,94,417	...	5,17,94,417	5,46,09,721	...	5,46,09,721
Interest on debt for purchase of railways	1,77,70,974	...	1,77,70,974	1,77,75,662	...	1,77,75,662	1,71,45,255	...	1,71,45,255
Interest on advances of Capital to Companies	59,82,593	...	59,82,593	65,22,559	...	65,22,559	73,38,124	...	73,38,124
Interest on Capital raised by Companies	1,80,73,955	...	1,80,73,955	1,88,06,943	...	1,88,06,943	1,95,36,392	...	1,95,36,392
Portion of annuities in purchase of railways representing interest on Capital	3,55,87,560	...	3,55,87,560	3,56,19,735	...	3,56,19,735	3,53,61,300	...	3,53,61,300
Interest on Capital of Guaranteed Companies	...	1,56,99,702	1,56,99,702	...	1,60,16,970	1,60,16,970	...	1,60,85,806	1,60,85,806
Total Interest	12,66,72,024	1,56,99,702	14,23,71,726	13,05,19,335	1,60,16,970	14,65,36,305	13,39,90,793	1,60,85,806	15,00,76,599
Surplus of net Revenue over Interest	2,59,73,542	—*31,47,365*	2,28,26,177	3,79,53,352	—*21,29,338*	3,58,24,014	3,87,29,249	—*25,16,140*	3,62,13,109
Portion of annuity payments representing redemption of Capital also charged against Revenue	94,64,955	...	94,64,955	95,01,780	...	95,01,780	98,28,285	...	98,28,285
Actual net gain+, or loss—	+1,65,08,587	—*31,47,365*	+1,33,61,222	+2,84,51,572	—*21,29,338*	+2,63,22,234	+2,89,00,964	—*25,16,140*	+2,63,84,824

12. As regards an account of the Capital liability in connection with railways owned by the State, there are some complications in stating the amount, owing to the fact that, in the case of some of the lines taken over, the purchase price is being paid by means of annuities. In these cases it seems correct to deduct from the original commuted Capital at which the lines were taken over, the amount redeemed by annuity payments up to date. On this basis the subjoined table shows the Capital liability at the end of 1905 on account of all railways classed as State railways; the State outlay, as recorded in rupees in the accounts being converted into sterling at the rate of Rs. 15=£1. The total Capital amounts to £248·44 millions (the details by railways being shown in Appendix 9); and on this the net revenues of the State railways for 1905, £11·51 millions, give a return of 4·63 per cent. The total Capital of the two old Guaranteed railways amounts to £23·53 millions as detailed below, and on this the net earnings of these railways for 1905, £904·64 thousands, give a return of 3·84 per cent.

Capital liability on account of railways classed as State railways at end of 1905.

1. Share Capital of purchased railways being paid off by annuities :—

	£	£
Commuted value of stock purchased	85,010,259	
Deduct—		
Commuted Capital representing annuities which were purchased by creation of debt (liability included under item 3)	12,754,190	
New stock of the Great Indian Peninsula railway exchanged for portion of annuity (liability included under item 5)	1,750,000	
Capital redeemed by annuity payments ...	5,210,942	
	19,715,132	
Net outstanding		65,295,127
2. State outlay		94,590,686
3. Debt incurred for purchase of railways		34,201,992
4. Capital advanced by Government to Companies		13,887,814
5. Capital raised by Companies on the Secretary of State's guarantee (including overdrafts of Capital)		40,460,328
TOTAL CAPITAL LIABILITY		248,435,947

Capital liability on account of Guaranteed railways at end of 1905.

Capital raised on the Secretary of State's guarantee, including overdrafts :—

	£	£
Madras railway	12,553,430	
Bombay, Baroda and Central India railway ...	10,980,214	
		23,533,644

Rates and fares.

13. In August 1905 the conditions and the minimum rates prescribed for the carriage of coal for the general public and for State or other railways were revised. Previously the minimum laid down was $\frac{1}{10}$th of a pie per maund per mile, but it was considered that this restricted the trade in places distant from the coal-fields. The minimum to which railways may now reduce their rates has been fixed at $\frac{1}{10}$th of a pie for distances up to 300 miles, *plus* $\frac{1}{15}$th of a pie from 300 to 500 miles inclusive, and *plus* $\frac{1}{20}$th of a pie for any distance in excess of 500 miles. The conditions are that the rates shall be calculated on the through distance between the station of origin and the station of destination of consignments; that, when there are two or more routes to destination from the colliery where the traffic originates, the railway or railways forming the longer route may calculate charges on the same mileage as

the railway or railways forming the shorter route; that coal for the use of foreign railways is charged at the same rates and under the same conditions as coal carried for the public; that the rates charged are divided between the railways over which the traffic is carried in proportion to the mileage of each, provided that, if the distance the coal is carried over any railway is less than 25 miles, the mileage of that railway in dividing the freight is reckoned as 25 miles, and that these rates shall be subject to revision at the end of three years from 1st September 1905.

Cheap "week-end" return tickets to and from the principal stations on the broad gauge section of the *Bombay, Baroda and Central India railway* were introduced as an experiment.

"Week-end" return tickets, at single fares for the double journey, were introduced by the *Eastern Bengal (State) railway.*

The East Indian railway introduced the following reduced scale of charges for 3rd class passengers:—

for the first 100 miles, 2½ pies per mile;
from 101 to 300 „ 2 pies per mile;
for additional distances
over 300 miles, 1½ pies per mile.

The Company also increased to 6 pies per maund its terminal charge on both local and foreign traffic generally in class goods on all parts of its system, and on mineral and special class goods at certain stations; and introduced a special reduced through rate of Re. 0-12-1 per maund for coal from all its colliery stations to all stations on the Kalka-Simla railway, to encourage the use of coal for domestic purposes at the hill stations served by the latter.

The higher charges for coaching and goods traffic over the Ludhiana-Dhuri-Jakhal railway were reduced to the level of those in force over other sections of the *North Western (State) railway*, the administration of which also introduced locally the reduced rates for coal referred to in the first paragraph of this section, subject to the usual conditions regarding risk and handling, to encourage the supply of cheap fuel.

On the *Oudh and Rohilkhand (State) railway* the 3rd class passenger fares were reduced, the rate of 2 pies per mile, which before applied to distances of above 100 miles, now applying to distances above 75 miles, and the rate of 1½ pies applying to distances above 150 miles instead of to distances of above 300 miles.

With effect from 1st of June 1905 special rates, from Mormugao Harbour to the principal stations on the *Southern Mahratta railway*, were quoted for goods booked under combined through bills of lading from British and Continental ports in conjunction with a line of steamers running direct to the port of Mormugao.

Important measures and events.

14. *Measures for the comfort and convenience of 3rd class passengers.*—A circular was issued on the 22nd of March 1905 to the several railway administrations, desiring, as stated in last year's report, their attention to the urgent necessity for providing (*i*) facilities for passengers to obtain their tickets a longer time before the departure of trains than they are at present able to do; (*ii*) facilities for examining tickets of 3rd class passengers, both at starting and roadside stations, as will enable the passengers to have proper access to the platform and take their seats in the train without the crush which too frequently occurs; and (*iii*) carriage accommodation for 3rd class passengers to prevent the over-crowding which is much too general.

The replies since received indicate that the administrations of the several railways appreciate the attitude of the Railway Board towards 3rd class passengers who are their best clients, providing as they do over 84 per cent. of the total receipts from passenger traffic.

In regard to the first point the majority of the most important railways have provided continuous booking at the principal stations and the opening of city offices for the issue of tickets, and at smaller stations the opening of ticket offices from periods varying from half an hour to two hours ahead of the train.

The second matter to which attention was called involves some re-arrangement of the waiting halls and platform gates. The railway administrations generally recognise that greater facilities are desirable and are taking steps to remedy the crowding and inconvenience complained of.

Under the third head the obvious remedy is to increase the stock of third class carriages, which is being done on most lines. In one instance it was pointed out that the passengers are themselves to blame for over-crowding. This is probably due to the natural wish of families making a journey to travel in the same carriage or compartment. It may be said generally that all three matters to which attention has been called by the Railway Board are receiving their earnest attention.

Another matter, which was not touched upon in the circular, was the most suitable style of third class carriage. The Railway Board have made enquiries of all the different railway administrations and find that there is some diversity of opinion, and they think that the carriage most suitable for the 3rd class passengers has yet to be designed. One of the points raised in the discussion was the provision of upper bunks or of luggage racks in 3rd class carriages. Some of the principal railways are of opinion that passengers distinctly appreciate and make use of the bunks provided. In the day time these bunks can be used as racks, and at night for lying down for a certain proportion of the occupants. Other railways consider that racks for luggage conduce more to the comfort of 3rd class passengers than do sleeping bunks. This latter opinion obtains more in the south than in the north of India, but all the railways are quite prepared to meet the wishes of the majority of their passengers as soon as they can, by experiment, ascertain what design is most appreciated.

Standard time.—With effect from the 1st July 1905 a standard time, which in India is exactly 5½ hours in advance of Greenwich and 9 minutes in advance of Madras time, and in Burma 6½ hours ahead of Greenwich and 5 minutes 23 seconds earlier than Rangoon time, has been adopted on the railways in India and Burma, other than on small local lines where the change would be inconvenient.

Indian Railway Conference Association.—A special meeting of the Indian Railway Conference Association was held in Simla from the 31st July to the 11th August 1905 to consider the revised general rules for working open lines of railway in India, and other matters.

Risk Notes.—Revised forms of Risk Notes B and H, under which a greater measure of responsibility will devolve upon railway administrations in the case of consignments carried by them at "special reduced" or "owner's risk" rate, have been considered, and have been referred to the administrations of the several Indian railways for their acceptance.

Construction of sidings into private premises.—A revised form of agreement for the extension of railway sidings into private premises was issued in July 1905 for adoption on State railways and as a general guide to other railways in preparing similar agreements. Under the revised terms the charge of 6 per cent. per annum—previously made by railways to cover interest, maintenance and depreciation on the cost of all permanent-way materials, etc., provided, laid and maintained by the railway administration, and of all works done in connection with such sidings at the expense of the railway—has been relinquished.

Use of local manufactures for railway purposes.—The Bengal Iron and Steel Company, Limited, have entered into a contract with the Secretary of State for India for the manufacture of steel rails and rolled sections at their Barakar Works, under the terms of which the latter is required to pay to the company an annual subsidy not exceeding £1,500, subject to a reduction of Rs. 3 for every ton of steel rails or bars purchased by, or on behalf of, Government. The Managers and Engineers-in-Chief of State railways have accordingly been requested to utilize steel of local manufacture so far as it is suitable for the works in their charge.

The Railway Board, after duly considering the representations received from various firms of manufacturing engineers in India asking that they might be given an opportunity of tendering for the construction of wagon frames and bodies in this country, have decided that, for a period of three years, tenders should be called for publicly in India for the supply of frames and bodies of twenty-five per cent. of the goods stock sanctioned for State railways, the requisite wheels, axles, springs and draw-bars to complete the wagons being indented for from England and supplied by the railway administration to the firm whose tender is accepted.

Supply of Australian wooden sleepers.—Mr. J. Adam, Executive Engineer, Railway Department, was deputed by the Government of India in 1904 to investigate the question of the supply of wooden sleepers from Australia, and has submitted a preliminary report on the production of wood for sleeper purposes in the Eastern States. A more complete report is expected embracing information relating to the Western States.

Improved lighting of trains.—This has continued to receive the attention of the Railway Board, and railway administrations have been kept informed of experiments made in electric lighting under two different systems. The application of incandescent mantles to Pintsch's gas burner is being experimented with.

St. John's Ambulance Institution.—To stimulate the interest of the staff of the *East Indian railway* generally in St. John's Ambulance Institution, established for the purpose of imparting instruction in the art of giving first aid to persons injured in railway accidents, the Company decided to give a reward to all those who pass the examination.

On the *Oudh and Rohilkhand railway* fair progress has been made with ambulance work, and arrangements have been made to equip brake-vans of all passenger trains with implements, and to supply books and appliances to such of the staff as have qualified, for affording first aid to the injured.

A class for general instruction of employés of the *Rajputana-Malwa railway* in affording first aid to injured persons was opened at Ajmer in January 1905.

On the *South Indian railway* an ambulance class in first aid to the injured is being held at Madura.

Purchases of railways by the State.—The Bengal Central Railway was purchased by the State and merged in the Eastern Bengal (State) railway system with effect from the afternoon of the 30th June 1905.

Notice was given to the Bombay, Baroda and Central India Railway Company of the termination, with effect from the 1st January 1906, of the Company's contracts with the Secretary of State for India. The railway, after purchase by the State, was made over to a re-constituted Company to work.

The Noakhali (Bengal) Railway Company suggested the transfer of their line to the Assam-Bengal railway. The purchase of the line by the State as from 1st January 1906 was accordingly agreed to and arrangements made to incorporate it with the Assam-Bengal railway.

Principal contracts entered into during the year.—An agreement for the working by the Southern Mahratta Railway Company of the Bellary-Rayadrug and Hospet-Kottur famine feeder lines.

A memorandum of terms for the working by the Bengal-Nagpur Railway Company of the Mourbhanj Light railway for the period 1st January 1905 to 31st December 1905, and thereafter from year to year until the agreement is terminated by notice.

On the 4th October 1905 an indenture was executed with the Southern Punjab Railway Company for the construction of the MacLeod Ganj-Ferozepore-Ludhiana extension.

On the 4th December 1905 an indenture was executed with the Barsi Light Railway Company, making certain modifications in the Company's contract of 20th August 1902 for the construction and working of the Pandharpur and Tadwalla extensions, and providing for the issue of Debenture Stock.

On the 14th December 1905 an indenture was executed with the Bengal and North-Western Railway Company, Limited, continuing, with modifications, the contract dated 18th July 1890 relating to the Tirhoot (State) railway, and also modifying the contract of 12th December 1882 relating to the Company's railway.

On the 27th December 1905 an indenture was executed with the Bombay, Baroda and Central India Railway Company for the issue of India Stock on purchase of the Company's undertaking, and for provisional working of the Company's system as from 31st December 1905.

In connection with the running by Messrs. Frank C. Strick & Co. of London, of a new line of steamers to the Port of Mormugao, an agreement was executed between that Company and the Southern Mahratta Railway Company for the through booking of traffic between the British and Continental ports and stations on the Southern Mahratta railway.

The *Bengal-Nagpur railway* took over the working of the Mourbhanj Light railway on and from the 1st January 1905.

In November 1905 the administrative offices of the *Bombay, Baroda and Central India railway* at Bombay were seriously damaged by fire. Their restoration is well in progress.

On the *Eastern Bengal State railway* a wagon ferry service was established on the Ganges between Damukdia Ghat and Sara Ghat in February 1905 for crossing heavy machinery and coal. With effect from the 15th May 1905 through booking of goods traffic, *viâ* Dhubri Ghat, was established between stations on the Northern and Behar sections of the line and *viâ* the steamer stations of the Assam Service south of Dhubri Ghat, and stations on the Dacca section *viâ* Jagannathganj.

On the 6th February 1905 the Government of India sanctioned the purchase of the Chabra section of the Bina-Goona-Baran railway by the Gwalior Durbar from the Tonk Durbar, on the condition that the Gwalior Durbar agreed to abide by the terms under which that section of the line was then worked by the *Great Indian Peninsula railway.*

The administrations of the *Bhavnagar-Gondal-Junagad-Porbandar and Morvi railways* introduced a through service between Wadhwan Junction and Jamnagar, consequent on the establishment, on the 4th March 1905, of through direct connection between Wadhwan Junction and Rajkot Junction by the conversion of that portion of the Morvi railway from the 2′ 6″ to the metre gauge.

Through booking of goods and passenger traffic between the *Tarakeshwar-Magra Light railway* and the Calcutta Steam Navigation Company's steamer service, *viâ* Tribeni, was introduced from January 1905.

Important works completed.

15. On the *Bengal-Nagpur railway*, the work of doubling the line through from Howrah to Khargpur; and the renewal of the girders (7 spans of 170 feet) of the Kanhan bridge near Kamptee.

By the *Bombay, Baroda and Central India railway*, a new locomotive station, for joint use with the Tapti Valley railway, at Kankra Khari, and the interlocking of points and signals thereat; a new station at Vile Parle, between Santa Cruz and Andheri; the renewal and duplication of minor girders between Ahmedabad and Viramgam; and the interlocking of 49 third class stations on the Rajputana-Malwa railway.

On the *Eastern Bengal (State) railway*, the bridges across the Churni (3 spans of 120 feet skew), near Ranaghat, and the Jellinghee (3 spans of 120 feet and 1 span of 250 feet with 35 feet headway), at Krishnagar, on the Murshidabad branch; and heavy renewals of girders on the Northern section to admit of the running of a heavier class of engines.

On the *East Indian railway*, the riverside warehouse at Howrah; the remodelling and re-construction of Delhi station; and a branch line to serve the Moodidih, Angarpathra and Guzlitor collieries.

By the *Great Indian Peninsula railway*, the Agra Road station, and the line therefrom to the point of junction with the Agra-Delhi Chord railway which now forms a part of the main line from Agra to Delhi; the quadrupling of the line between Byculla Junction and Curry Road; the doubling of the line between Khandwa and Itarsi; and the interlocking of points and signals at four intermediate stations.

By the *North Western (State) railway* the doubling of the line between Lahore and Amritsar; the remodelling and interlocking of Bhatinda station yard; and the construction of one wing of the Central Offices at Lahore.

The *Oudh and Rohilkhand (State) railway* permanent bridge (15 spans of 200 feet) over the Ganges river at Allahabad.

By the *Bengal and North-Western railway* a new bridge of 3 spans of 80 feet over the Bolan river, to replace the pin girder bridge of 3 spans of 60 feet; and the construction of the bridges and raising of the main bank of the Sagauli-Raxaul branch.

On the *Bengal-Dooars railway*, the Hathinulla girder bridge of 3 spans of 150 feet; the Khanabarti deviation, rendered necessary by irrigation works, including

a bridge of 3 spans of 40 feet girders; and special protection works at the larger bridges.

On the *Burma railways*, the relaying of 28 miles of 41¼-lb. steel track on the main line with 50-lb. steel rails; the interlocking of the points and signals at Mandalay and Myohaung; a new overbridge, with a clear span of 150 feet and a roadway 60 feet wide, at Shwehle Pagoda Road; and the doubling of the line between Pazundaung and Thingangyin and between Insein and Hlawga.

The *Morvi railway* converted the Wadhwan-Rajkot section from the 2′ 6″ to the metre gauge.

The *Rohilkund and Kumaon railway* relaid with 50-lb. section rails 30 miles of its own and 21 miles of the State line, which before were laid with 41¼-lb. rails.

Two new permanent stations on the *Bukhtiarpore-Behar Light railway.*

On the *Kalka-Simla railway* the permanent-way and curves, gradients and bridges were improved.

(1) A "Joint Water Supply" scheme, proposed in 1902, for supplying water in reliable and adequate quantities to the East Indian and Kalka-Simla railways and the Municipality at Kalka.

The *Darjeeling-Himalayan railway* extended the station building, and provided a new platform, loop siding, new engine shed and additional goods shed at Ghum.

Accidents.

16. The following is a statement of accidents of all descriptions to persons, which have occurred during the last five years :—

Year.	Passengers.						Servants.						Other persons.												"Total all classes."	
	From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		By accidents from other causes, including accidents from their own want of caution or misconduct.		Total.		From accidents to trains, rolling-stock, permanent-way, etc.		Whilst passing over railways at level crossings.		Trespassers.		Suicides.		Miscellaneous, not included in preceding columns.		Total.			
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1901.	3	47	91	251	94	298	14	83	261	375	275	458	13	14	28	3	542	170	129	9	33	18	745	214	1,114	970
1902.	127	184	98	239	225	473	37	95	269	364	306	459	13	13	16	3	542	162	108	5	21	26	700	209	1,231	1,141
1903.	50	116	93	331	143	447	15	95	275	390	290	485	12	7	16	3	510	172	138	5	35	22	711	209	1,144	1,141
1904.	11	83	105	321	116	404	23	103	250	364	273	467	6	15	23	1	577	186	120	2	41	14	767	218	1,156	1,089
1905.	3	140	115	356	118	496	15	115	308	462	323	577	5	15	25	4	661	173	134	5	39	23	864	220	1,305	1,293

There was an increase of 149 and 204 in the total number of persons killed and injured from all descriptions of accidents during 1905, as compared with the previous year.

The total number of persons of all classes killed by causes beyond their control was 23 against 40, and the number injured 270 against 201. Out of a total of 248·16 millions against 227·10 millions of passengers travelling, and of 9,900·48 millions of miles against 9,006·85 millions of miles travelled, 3 passengers were killed and 140 injured against 11 killed and 83 injured. This gives an average of one fatal casualty in 82·72 millions against one in 20·65 millions of persons travelling, and an average of one in 3,300·16 millions against one in 818·80 millions of miles travelled in 1905 and 1904 respectively.

17. The following are particulars of the more serious train accidents :—

Nos. 124 down goods and 64 down van goods trains collided at Khana junction, *East Indian railway*, on the 7th February 1905, due to the driver of the former train running against signals. One person was killed and seven injured. The rolling-stock was considerably damaged.

No. 4 down mixed train was derailed at mile 90-22, between Lalmai and Comilla stations, *Assam-Bengal railway*, on the 23rd February 1905, due to the removal of fish plates and bolts and the slewing of the line by some person or persons unknown. Four railway servants were seriously injured, one of whom subsequently died. The rolling-stock was considerably damaged.

Nos. 7 up mixed and 84 down goods trains collided at Amethi station, *Oudh and Rohilkhand (State) railway*, on the 1st June 1905, due to the engine of the latter train fouling the crossing. Eight passengers and twelve railway servants were injured. The rolling-stock was damaged.

No. 6 down passenger train collided with a pilot engine at Partabgarh station, *Oudh and Rohilkhand (State) railway*, on the 2nd June 1905, owing to points having been incorrectly set. Five passengers and one railway servant were injured.

Nos. 9 up passenger and 10 down mixed trains collided at Kot Sultan station, *North Western (State) railway*, on the 17th July 1905, due to points not having been correctly set. Seventeen passengers were injured. The rolling-stock and permanent-way were damaged.

Nos. 101 up and 64 down goods trains collided at Taljhari station, *East Indian railway*, on the 17th November 1905, due to the disregard of signals by the driver of the former train. One railway servant was killed and five injured. The rolling-stock was considerably damaged.

No. 4 down Punjab Bombay mail and M. M. up troop special trains collided near Lahore station, *North Western (State) railway*, on the 1st December 1905, due to points having been wrongly set. Seventeen passengers were injured. The rolling-stock was considerably damaged.

No. 4 down mixed train was derailed near Mantala station, *Assam-Bengal railway*, on the 27th December 1905, due to the bad state of the road. Three passengers were injured, two of whom subsequently died. The rolling-stock was damaged.

Damages by floods and rainfall.

18. The line between Naupada and Vizianagram on the East Coast Section of the *Bengal-Nagpur railway* was seriously damaged by a cyclonic storm of exceptional violence in September.

The *Bombay, Baroda and Central India railway system* suffered considerably from heavy rain in July. Several breaches occurred both on the main line and branches, and there was serious damage to the permanent-way and bridges.

On the *Eastern Bengal (State) railway* floods in August washed away a pier of a bridge on the Kaunia-Dhubri extension and damaged the wing-walls of a bridge on the Brahmaputra-Sultanpur branch. The Brahmaputra river rose in flood in September and washed out the line in places at Goalundo Ghat.

On the *East Indian railway* heavy rainfall in September caused the Karmnasa river to overflow and flood a portion of the main line between Dildarnagar and Gahmar. This rainfall also caused serious breaches in several places and considerable damage to many bridges on the Moghal Sarai-Gya section, and to a bridge on the Barun-Daltonganj branch. Floods caused by heavy rain in July washed away a portion of the Tarkessur branch.

Portions of the *Great Indian Peninsula railway* suffered from floods caused by heavy rain in July. On the Nagpur branch, between miles 382 and 390, the embankment was badly breached in several places in the vicinity of bridges, the permanent-way at one place and the wing-wall of an abutment being washed away. On the North-East line, between Dongargaon and Bagmar, heavy rain washed away a portion of the embankment, the rush of water carrying the track out to the fencing.

Heavy slips of boulders occurred on the *Nilgiri railway*, causing interruption to through traffic during the latter part of November.

The only serious flood damages during the year on the *North Western (State) railway* were caused in September by an exceptional flood in the Chenab river, which effected several small breaches in the bank between Mooltan and Shershah and interrupted traffic for 96 hours.

Excessive rainfall during June, July, October and November breached the *Assam-Bengal railway*, and caused considerable detention to traffic, in several places.

On the *Bengal and North-Western railway* the Orai bridge, on the Katarnian Ghat branch, was partly washed away by a spill from the Girwa river in July, involving a temporary diversion till September. Floods in September partially damaged several bridges between Nirmali and Raharia, interrupting the traffic for about three weeks.

On the *Bhavnagar-Gondal-Junagad-Porbandar railway* floods due to heavy rain in July caused washouts at several places between Limbdi and Wadhwan City, and on the Dhrangadra railway. Breaches occurred at places on either side of Hadmatia and Pad-dhari stations on the Jamnagar railway.

Heavy floods caused considerable damage on the *Burma railways*. The south abutment of a bridge and the approaches of several others were washed away. The line was badly breached in several other places, especially on the Alon branch.

The *Jodhpur-Bikaner railway* was breached by floods in September at miles 316 to 318 and at miles 320 to 323 on the Merta Road-Bhatinda section.

Heavy rain in July breached the *Morvi railway* in several places, on the metre gauge between Wadhwan and Than and on the 2′ 6″ gauge between Vankaner and Morvi.

On the *Southern Mahratta railway* the Hospet-Kottur branch line, at places between miles 36 and 40, was washed away by heavy rain in October. On the 15th October, between Maklidrug and Dodballapur stations, the engine attached to the Down Mail train was derailed by several tons of rock slipping from the side of the cutting and striking the engine while the train was passing. No one was injured.

Owing to the bursting of some "bunds" on the Sone and Marwan rivers in September, the whole of the country between Chero and Harnaut stations on the *Bukhtiarpore-Behar Light railway* was flooded. A culvert was washed away and the line for a space of about 30 feet was left suspended.

Heavy rainfall and floods in July breached the *Tarakeshwar-Magra Light railway* in several places. Traffic between Tarkessur and Bhastara was stopped for about three weeks.

At the end of July there were heavy floods and washouts on the portion of the *Howrah-Amta Light railway* between Bargachia Junction and Amta; also on the whole length of the Autpur section.

The *Howrah-Sheakhala Light railway* was breached between Moshat and Sheakhala at the end of July.

A breach was caused by floods in August on the Gosaigaon-Patiagaon section of the *Jorhat (State) railway*. Through communication between the river terminus and Jorhat stations was not restored till December.

Railway staff.

19. The total number in railway employ at the close of the year was 452,058, of which 6,535 were Europeans, 9,175 Eurasians and 436,348 Natives. Of the Europeans and Eurasians 12,989 were enrolled as volunteers.

20. The Police force employed for the maintenance of law and order on railways and for the protection of railway property is provided by the Civil Department, the State bearing, except in the case of State lines worked by the State and the old Guaranteed railways, three-tenths and the railways paying seven-tenths of the expense incurred.

21. Every monthly paid employé, who is neither pensionable nor a menial servant, is obliged to be a member of the Provident Fund and is required to

subscribe monthly amounts varying on different railways but not exceeding one-twelfth of his salary. At the close of the half-year the railway distributes, as bonus among the depositors, a first contribution equal to one-half of their subscriptions, and a second contribution not exceeding one-half of such subscriptions or one per cent. of net earnings.

22. The Fine Fund is used in the relief of families left in destitute circumstances, and to assist in keeping up schools, recreation clubs and similar institutions.

23. On the larger railways schools are provided and maintained at all centres where the number of children is sufficient to justify the employment of the teaching staff. The fees charged are graduated so as not to press too heavily on the poorer employés. Government, in the Educational Department, allow certain grants towards the maintenance of the schools, and any deficit is made good from the revenues of the railway or from the Fine Fund. Where the number of employés is not large enough to justify the provision of a railway school and there already exists a public or private school in the town, the schooling fees are borne wholly or in part by the railway.

The assistance thus given to employés is much appreciated, and a proper standard of education is ensured by the examination which is conducted yearly by the Government Inspectors of Schools before the grant can be drawn.

The number attending railway schools amounted, at the close of 1905, to 6,907 children and 6,106 apprentices and workmen.

Railway surveys.

24. The following surveys were completed during 1905 :—

The re-survey of the Gondia-Chanda railway, with a branch from Brahmapuri to Nagpur, 212 miles, on the 2′ 6″ gauge, and the survey of a line from Purulia to Ranchi, 72 miles, also on the 2′ 6″ gauge, by the *Bengal-Nagpur railway*.

Lines from (1) Nar to Wasu, 13 miles, on the 5′ 6″ gauge; (2) Vijapur to Wadnagar, 17 miles, on the 3′ 3⅜″ gauge; (3) Hansi to Jakhal, 51 miles, also on the 3′ 3⅜″ gauge; and (4) Nar to Piej, 17 miles, on the 2′ 6″ gauge, all by the *Bombay, Baroda and Central India railway*.

An extension of the Murshidabad branch of the *Eastern Bengal (State) railway* from Lalgola to Gherria, 13 miles, on the 5′ 6″ gauge, and from Krishnagar station on the same branch to Jellinghee, 56 miles, on the 2′ 6″ gauge.

By the *Great Indian Peninsula railway* from Bellarpur to Warangal, eastern route, 183 miles; Kazipet branch, 8 miles, and a portion of the western route from Muravaya to Chintalchem, 22 miles, on the 5′ 6″ gauge; and reconnaissance surveys of lines from (1) Dewalwari to Bamena, (2) Ripanpelli to Gawalkoonda, (3) Sironcha to Gamalkonda, (4) Madarum to Chitur, and (5) Sironcha to Parkal, aggregating 175 miles.

The extension of the *Nilgiri railway* from Coonoor to Ootacamund, 12 miles (now under construction), on the 3′ 3⅜″ gauge, by the *State*.

Reconnaissance surveys by the *Nizam's Guaranteed State railway* of lines from (1) Purbhani to Latur, 71 miles; Hyderabad to Guntakal, 190 miles; and Wadi to Nanded, 210 miles, all on the 3′ 3⅜″ gauge.

By the *North Western (State) railway* lines from (1) Thal to Parachinar, 59 miles; (2) Chuharkana to Shorkot Road, 131 miles; (3) Lodhran to Khanewal, 57 miles; and (4) Patiala to Jakhal, 50 miles, all on the 5′ 6″ gauge.

A line from Balamau to Sitapur, 37 miles, on the 5′ 6″ gauge, by the *Oudh and Rohilkhand (State) railway*.

Lines from Pertabganj station, on the Tirhoot (State) railway, to Birpore on the bank of the Kosi river, 15 miles; and from Dhang, on the same line, to Bairagnia, together with a site for a permanent bridge over the Bagmatti river, 3 miles, on the 3′ 3⅜″ gauge, by the *Bengal and North-Western railway*.

A reconnaissance for a railway from Bhamo to Tengyüeh, 124 miles, on the 2′ 6″ gauge, by the *Burma railways*.

The *Jodhpur-Bikaner railway* made a reconnaissance survey for a light line from Mirpur Khas to Jhudo, 47 miles.

By the *Rohilkund and Kumaon railway*, for the extension, to Ramnagar Ghat, of the Dudhwa branch of the Lucknow-Bareilly railway, 21 miles, on the 3′ 3⅜″ gauge.

By the *South Indian railway* for doubling the line from Madras Beach to Pallavaram, 15 miles; from Kumbakonam to Mannargudi, 23 miles; from Cuddalore to Vriddachalam, 34 miles, all on the 3′ 3⅜″ gauge.

An extension of the *Baraset-Basirhat Light railway* from Basirhat to Hussanabad, 8 miles, on the 2′ 6″ gauge.

Survey of the *Shahdara (Delhi)-Saharanpur Light railway* with a branch to Meerut, 125 miles, on the 2′ 6″ gauge.

An extension of the *Howrah-Amta railway* from Autpur to Champadanga, 8 miles, on the 2′ 0″ gauge.

25. The following surveys are in progress:—

By the *Bengal-Nagpur railway* lines from (1) Kamptee to Ramtek, 20 miles, on the 5′ 6″ gauge; (2) Tumsar Road to Katangi, 50 miles; (3) from a point on the Mandla branch of the Satpura railway to Bilaspur, 170 miles; and (4) from a point between Gurmasaini Hill to Sini, 52 miles, all on the 2′ 6″ gauge; and a reconnaissance survey from Gurmasaini Hill to a point between Narsinghar and Chakulia, 35 miles, on the 2′ 6″ gauge.

By the *Eastern Bengal (State) railway*, (1) the location of a line, on the 3′ 3⅜″ gauge, from Forbesganj station, on the Debiganj branch of the Behar section, to the Nepal frontier, 6 miles, to serve Nepalganj, a rapidly rising trading centre situated three miles beyond the frontier; (2) from Rangiya station, on the Gauhati extension, to Tezpore in Assam, 78 miles, on the 3′ 3⅜″ gauge; and (3) from Netrokona to Lengar Bazar in Assam, 40 miles, on the 3′ 3⅜″ gauge.

By the *Madras railway* from Dharmapuri, *viâ* Palakodu, to Krishnagiri, and from Palakodu to Bangalore, 92 miles, on the 2′ 6″ gauge.

A reconnaissance survey by the *Nizam's Guaranteed State railway* for a line from Wadi to Kopbal.

By the *North Western (State) railway* from Jhang, *viâ* Chiniot, to Sangla, 70 miles, on the 5′ 6″ gauge.

By the *Oudh and Rohilkhand (State) railway* from Rosa to Sitapur, 52 miles, on the 5′ 6″ gauge.

By the *Bengal and North-Western railway* from Benares to Allahabad with a branch to Mirzapur, 75 miles, on the 3′ 3⅜″ gauge.

A detailed survey for a railway on the 2′ 6″ gauge from Bhamo, on the *Burma railways*, to Tengyüeh, 124 miles.

By the *Assam Railways and Trading Company (Dibru-Sadiya railway)*, an extension from Talap station to Saikhwa Ghat, 9 miles, on the 3′ 3⅜″ gauge.

By the *Jodhpur-Bikaner railway* from Borawar to Hissar, 180 miles, on the 3′ 3⅜″ gauge.

The re-survey, by the *Rohilkund and Kumaon railway*, of the Pilibhit-Barmdeo branch, 38 miles, on the 3′ 3⅜″ gauge.

By the *South Indian railway* from Palghat, *viâ* Kollengode, to Pollachi, 38 miles, on the 5′ 6″ gauge, and from Tiruturaipundi to Vedaraniyam, 20 miles, on the 3′ 3⅜″ gauge.

From Gadag, on the main line, to Yalvigi, on the Harihar branch, about 38 miles, on the 3′ 3⅜″ gauge, by the *Southern Mahratta railway*.

Brief notes on projects for new lines.

26. The District Board of Kurnool submitted proposals for the construction, on the 3′ 3⅜″ gauge, of the Kurnool Road (Dhone), Kurnool railway (Madras), 32 miles, with the help of a special cess levied under the provisions of amended section 57 (ii) of the Madras Local Boards Act, 1884 (V of 1884), supplemented by a loan from the Government of Madras under the Local Authorities Loan Act, 1879 (XI of 1879). The proposals are awaiting a decision on the question of the alignment of

the proposed through metre gauge connection between the railways in northern and southern India.

Revised proposals for the construction of the Rawalpindi-Murree railway (Punjab), 40 miles, on the 3′ 3⅜″ gauge, are under consideration.

The construction of a 5′ 6″ line from Sarai Kala to Abbottabad, about 50 miles, and thence, on the 3′ 3⅜″ gauge, *viâ* Domeli and Baramula, to Srinagar, about 160 miles (North-West Frontier Province and Kashmir), the latter section to be worked by electricity, is under the joint consideration of the Government of India and the Kashmir Darbar.

The terms of concession for the construction of the following extensions of the Dacca (State) railway, *viz.*—

	Gauge.	Miles.
(*a*) Mymensingh, *viâ* Netrokona, to Bara Ari, with a branch to Gauripur (Eastern Bengal and Assam)	3′ 3⅜″	36½
(*b*) Singhjani, *viâ* Sherpur, to Nalitabari (Eastern Bengal and Assam)	2′ 6″	25

are under consideration.

Proposals for constructing a steam tramway on the 2′ 0″ gauge from Cawnpore to the left bank of the Jumna, opposite Hamirpur (United Provinces), 35½ miles, which were stated in the last report to be under consideration, have fallen through, as the promoters do not desire to proceed with the scheme on the terms offered.

The following proposals, also mentioned in the report for 1904, are still under consideration :—

(*i*) for extending the Ahmedabad-Dholka railway from Dholka to Dhandhuka (Bombay), 40 miles ;

(*ii*) for constructing a steam tramway from Dhandhuka to Ranpur (Bombay), 18 miles ;

together with an alternative proposal, put forward by the Bhavnagar-Gondal-Junagad-Porbandar railway administration, for extending their 3′ 3⅜″ gauge railway from Ranpur to Dhandhuka and thence to Dholka.

Negotiations for the construction of the following lines have not advanced since 1904 :—

(*a*) a tramway or light railway on the 2′ 0″ or 2′ 6″ gauge from Kamptee to Deolapar, with a branch from Munsar to Ramteck (Central Provinces), 34½ miles ;

(*b*) a light railway on the 2′ 6″ gauge from Serajganj to Ullapara (Eastern Bengal and Assam), 18 miles.

The following proposals for railways to be constructed were received during 1905 :—

(*i*) a light railway from Samastipur to Rowsara (Bengal), 17½ miles, to be financed by the District Board of Darbhanga ;

(*ii*) a light railway from Rowsara to Khagaria (Bengal), 44 miles, to be financed by the District Board of Monghyr ;

(*iii*) an extension on the 3′ 3⅜″ gauge of the Ahmedabad-Parantij railway from Idar Road to Bramhakhed (Bombay), 32 miles ;

(*iv*) a steam tramway from Borjan to Suntak (Eastern Bengal and Assam), about 8 miles, of which about 6 miles to be on the 3′ 3⅜″ gauge and the remainder on the 2′ 0″ gauge.

As regards (*i*) and (*ii*) the District Boards have signified their intention of withdrawing their proposals in favour of the lines proposed by the Bengal and North-Western railway from (*a*) Darbhanga to Khagaria and (*b*) from Samastipur, *viâ* Rowsara, to some suitable point on (*a*), provided the lines are undertaken within a reasonable time. Projects (*iii*) and (*iv*) are under consideration.

The following proposals for railways in Aden were under consideration on the 31st December 1905 :—

(*i*) construction of a 2′ 6″ gauge line from Aden to Nobat Dakim, *viâ* Lahej, 40 miles ;

(*ii*) construction of a railway from Aden to Sheikh Othman and D'thala.

A meeting of the Railway Board was held at Hyderabad in July 1905 to record the views of railway administrations interested in the proposed through metre gauge connection between the railways in northern and southern India. After a careful consideration of these views the Railway Board formulated definite proposals for carrying the scheme into effect. These are under the consideration of the Government of India.

The promoters, Messrs. Wilson & Co., of the Madura District Light (Vaigai Valley) railway, have since renounced the concession granted to them for the construction of this line, in consequence of their inability to form a company and to raise the necessary capital.

In connection with a proposal of Messrs. Tata and Sons of Bombay for building Iron and Steel works near Sini, sanction was accorded to the survey, by the Bengal-Nagpur railway, of a line on the 2′ 6″ gauge between Gurmasaini Hill in the Mourbhanj State and the Bengal-Nagpur railway near Sini, 52 miles; also to a reconnaissance for a line, about 35 miles in length, from the hill to a point on the main line between Nursinghar and Chakulia. Messrs. Tata and Sons have since represented that the line should be on the 5′ 6″, instead of on the 2′ 6″, gauge. The question is under the consideration of the Government of India.

The construction of the Tinnevelly-Tiruchendur railway branch is in abeyance, pending the settlement, between the South Indian Railway Company and the Tinnevelly District Board, of terms for its construction and working.

A scheme for working both the Nilgiri railway and the Coonoor-Ootacamund extension thereof by electricity has been investigated. The estimate is under consideration.

A scheme for a canal and harbour at Rameswaram having been put forward for consideration, the British Admiralty intimated that, from an Imperial standpoint, a harbour at Rameswaram would be of no strategic value. Its commercial value and the probable cost of the necessary marine works are under investigation by the Marine Department and the Government of Madras.

APPENDIX 1.

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

Number. Main head.	Sub-heads.	Name of Railway.	Letters used to denote names of railways.	Railway administration by which worked.	Date of first opening of any portion for traffic.	Gauge.	Length of Railway, in miles, open on 31st December 1905, under several heads of classification. State lines worked by agency of: State railway.	State lines worked by agency of: Company.	Guaranteed railway.	Assisted railway.	Unassisted railway.	Lines owned by Native States and worked by agency of: Native State itself.	Lines owned by Native States and worked by agency of: Company.	Lines owned by Native States and worked by agency of: State railway.	Lines in foreign territory.	Remarks.
		A														
5	(b)	Agra-Delhi Chord.	A.D.C.	Great Indian Peninsula Ry. Co.	15-11-04	5′ 6″	...	119·75	...	...	...	...	...	...	...	
2	(g)	Ahmedabad-Dholka	A. D.	Bombay, Baroda and Central India Ry. Co.	23-2-03	3′ 3½″	...	...	...	33·50	...	...	...	...	...	Rebate lines.
2	(h)	Ahmedabad-Parantij.	A. P.		1-5-97	3′ 3½″	...	...	...	54·70	...	...	...	...	...	
11	(c)	Assam-Bengal	A. B.	Assam-Bengal Ry. Co.	1-7-95	3′ 3½″	...	740·38	...	...	...	...	...	...	...	
		B														
24	(a)	Baraset-Basirhat Light.	B.B.L.	Baraset-Basirhat Light Ry. Co.	1-2-05	2′ 6″	...	...	...	26·06	...	...	...	...	...	Subsidized by District Board.
25	(a)	Barsi Light	B. L.	Barsi Light Ry. Co.	1-3-97	2′ 6″	...	...	...	27·93	...	...	...	...	...	Government land provided free.
22	(b)	Bellary-Rayadrug	B. R.	Southern Mahratta Ry. Co.	1-7-05	3′ 3½″	...	33·35	...	...	...	...	...	...	...	
12	(d)	Bengal and North-Western.	B. & N.-W.	Bengal and North-Western Ry. Co.	2-4-84	3′ 3½″	...	...	...	901·32	...	...	...	...	...	Government land provided free.
13	(a)	Bengal Dooars	B. D.	Bengal Dooars Ry. Co.	15-1-98	3′ 3½″	...	...	...	36·40	...	...	...	...	...	Subsidized by District Board.
13	(b)	Bengal Dooars Extensions.	B. D. E.		20-4-00	3′ 3½″	...	...	...	116·56	...	...	...	...	...	Government land provided free.
1	(a)	Bengal-Nagpur	B. N.	Bengal-Nagpur Ry. Co.	1880	5′ 6″	...	1,659·76	...	...	...	...	...	...	...	
8	(b)	Beswada Extension	B. E.	Nizam's Guaranteed State Rys. Co.	10-2-89	5′ 6″	...	20·58	...	...	...	...	...	...	...	
14	(a)	Bhavnagar-Gondal-Junagad-Porbandar	B. G. J. P.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	20-12-99	3′ 3½″	...	...	...	...	...	334·19	...	...	...	Includes 5·23 miles of dock estate and quarry lines.
5	(c)	Bhopal-Itarsi (British section).	B. I.	Great Indian Peninsula Ry. Co.	1-6-82	5′ 6″	...	13·11	...	...	...	...	...	...	...	
		Bhopal-Itarsi (Native State section).			18-11-84	5′ 6″	...	...	...	...	...	...	44·28	...	...	
5	(d)	Bhopal-Ujjain	B. U.		11-11-05	5′ 6″	...	...	...	...	...	...	113·27	...	...	
18	(b)	Bikaner	J. B. B.	Jodhpur-Bikanir Ry.	9-12-91	3′ 3½″	...	...	...	...	...	245·35	...	...	...	
5	(e)	Bina-Goona-Baran.	B. G. B.	Great Indian Peninsula Ry. Co.	22-9-95	5′ 6″	...	...	...	...	...	...	145·63	...	...	
22	(c)	Birur-Shimoga	B. S. G.	Southern Mahratta Ry. Co.	1-12-99	3′ 3½″	...	...	...	...	...	...	37·92	...	...	
2	(a)	Bombay, Baroda and Central India.	B. B. & C. I.	Bombay, Baroda and Central India Ry. Co.	10-2-60	5′ 6″	...	...	504·35	...	...	...	...	...	...	Guaranteed under old contract. Includes 39·23 miles of 3′ 3½″ gauge line between Viramgam and Wadhwan.
26	(a)	Bukhtiarpore-Behar Light.	B. B.	Bukhtiarpore-Behar Light Ry. Co.	1-7-03	2′ 6″	...	...	...	18·50	...	...	...	...	...	Subsidized by District Board.
15	(c)	Burma	B.	Burma Railways Co..	2-5-77	3′ 3½″	...	1,340·15	...	...	...	...	...	...	...	
		C														
10	(c)	Cawnpore-Barhwal (metre gauge link).	C. B. M.	Oudh and Rohilkhand State Ry.	24-11-96	3′ 3½″	79·60	...	...	...	...	...	...	...	...	Excludes 3·40 miles of the Lucknow-Bareilly railway between Aishbagh and Daliganj, worked over, but includes 16·79 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Barhwal and Bara Banki and 0·59 mile on the Gawnpore Bridge of the Oudh and Rohilkhand State Railway.
3	(d)	Cooch Behar	C. B.	Eastern Bengal State Ry.	15-9-93	2′ 6″	...	...	...	...	...	...	...	33·60	...	
27	(a)	Cutch	C.	Cutch Ry.	18-8-05	3′ 6″	...	...	...	...	...	11·86	...	...	...	Includes 0·19 mile of dock estate line.
		D														
9	(f)	Dandot Light	D. L.	North Western State Ry.	5-7-89	2′ 0″	6·18	...	...	...	...	...	...	...	...	
35	(a)	Darjeeling-Himalayan.	D. H.	Darjeeling-Himalayan Ry. Co.	23-8-99	2′ 0″	...	...	...	51·00	...	...	...	...	...	Subsidized by the Local Government.
4	(b)	Delhi-Umballa-Kalka.	D. U. K.	East Indian Ry. Co.	1-3-91	5′ 6″	...	...	...	162·36	...	...	...	...	...	Subsidized by the Government of India.
16	(a)	Deoghur	D.	Deoghur Ry. Co.	23-12-82	3′ 3½″	...	...	...	4·79	...	...	...	...	...	Government land provided free.
				Carried over			85·78	3,957·08	504·35	1,493·12	...	591·40	341·10	33·60	...	

APPENDIX 1—*contd.*

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

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		D—*concld.*			Brought	forward	85·78	3,957·08	504·35	1,433·12	...	591·40	341·10	33·60	...	
14	(b)	Dhrangadra . .	D.H.R.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	1-6-99	3′ 3½″	...	...	...	...	...	20·83	...	...	...	
17	(a)	Dibru-Sadiya .	D. S.	Assam Railways and Trading Co.	Aug. 82	3′ 3½″	...	...	...	77·50	...	...	...	...	...	Subsidized by Local Government.
		E														
		Eastern Bengal State—														
		Behar, Kaunia-Dhubri and Northern sections.			23-8-77	3′ 3½″	596·09	...	...	...	...	...	...	...	...	
3	(b)	British section, Santrabari extension and Ennaghat-Krishnagar and Teesta-Kurigram branches.	E.B. S. M.	Eastern Bengal State Ry.	18-7-81	2′ 6″	55·03	...	...	...	...	...	...	...	...	
		Dacca section .			4-1-85	3′ 3½″	85·93	...	...	...	...	...	...	...	...	
3	(a)	Central, Eastern and Southern sections.	E.B.S.		2-1-62	5′ 6″	497·95	...	...	...	...	...	...	...	...	
4	(a)	East Indian . .	E. I.	East Indian Ry. Co.	15-8-54	5′ 6″	...	1,972·30	...	...	...	...	...	...	...	
		G														
3	(a)	Gaekwar's Dabhoi	G. D.	Bombay, Baroda and Central India Ry. Co.	8-4-73	2′ 6″	...	...	...	...	...	...	94·49	...	...	
2	(c)	Gaekwar's Mehsana	G. M.		21-3-67	3′ 3½″	...	...	...	...	...	...	92·63	...	...	
2	(b)	Godhra-Rutlam-Nagda.	G. R. N.		16-1-93	5′ 6″	...	141·14	...	...	...	...	...	...	...	
5	(a)	Great Indian Peninsula.	G. I. P.	Great Indian Peninsula Ry. Co.	18-4-53	5′ 6″	...	1,661·63	...	...	...	...	...	...	...	
22	(d)	Guntakal-Mysore Frontier.	G. M. F.	Southern Mahratta Ry. Co.	1-3-92	3′ 3½″	...	119·50	...	...	...	...	...	...	...	
5	(g)	Gwalior Light .	G. L.	Great Indian Peninsula Ry. Co.	2-12-99	2′ 0″	...	...	...	...	...	...	183·53	...	...	
		H														
10	(b)	Hardwar-Dehra .	H. D.	Oudh and Rohilkhand State Ry.	1-3-00	5′ 6″	...	...	32·04	...	...	...	...	...	...	Guaranteed under modern contract.
22	(e)	Hindupur (Yesvantpur-Mysore Frontier).	H.	Southern Mahratta Ry. Co.	15-12-92	3′ 3½″	...	...	...	...	...	...	51·35	...	...	
22	(f)	Hospet-Kottur .	H. K.		1-4-05	3′ 3½″	...	43·06	...	...	...	...	...	...	...	
36	(a)	Howrah-Amta Light.	H. A.	Howrah-Amta Light Ry. Co.	1-7-97	2′ 0″	...	...	...	37·19	...	...	...	...	...	Subsidized by District Board.
37	(a)	Howrah-Sheakhala Light.	H. S.	Howrah-Sheakhala Light Ry. Co.	2-8-97	2′ 0″	...	...	...	19·75	...	...	...	...	...	
9	(c)	Hyderabad-Godavari Valley.	H. G. V.	Nizam's Guaranteed State Rys. Co.	21-10-99	3′ 3½″	...	...	...	...	...	...	391·13	...	...	Includes 5·93 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Hyderabad and Secunderabad over which the Nizam's Guaranteed State railway trains also work.
		I														
5	(f)	Indian Midland .	I. M.	Great Indian Peninsula Ry. Co.	10-1-78	5′ 6″	...	907·90	...	...	...	...	...	...	...	
					Carried	over .	1,320·76	8,602·61	536·39	1,567·56	...	612·23	1,154·23	33·60	...	

APPENDIX 1—*contd.*

List of open lines of Railway at the close of the Calendar year 1905 alphabetically arranged, with their lengths, the administrations by which worked, gauge and classification.

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		J			Brought	forward	1,320·76	8,602·61	536·39	1,567·56	...	612·23	1,154·23	33·60	...	
2	(j)	Jaipur (Siwai Madhopur).	J. S. M	Bombay, Baroda and Central India Ry. Co.	10-11-05	3′ 3½″	...	...	...	...	...	...	32·18	...	...	
9	(b)	Jammu and Kashmir (Native State section).	J. K.	North Western State Ry.	15-3-00	5′ 6″	...	...	...	...	...	...	...	15·98	...	The British section of this railway forms an integral portion of the North Western State railway.
14	(c)	Jamnagar . .	J. N.	Bhavnagar-Gondal-Junagad-Porbandar Ry.	8-4-97	3′ 3½″	...	...	...	...	...	54·23	...	...	...	Includes 3·93 miles of dock estate lines.
14	(d)	Jetalsar-Rajkot .	J. R.		12-4-93	3′ 3½″	...	...	...	...	...	46·21	...	...	...	
18	(a)	Jodhpur . .	J. B.	Jodhpur-Bikaner Ry.	24-5-62	3′ 3½″	...	...	...	...	...	463·89	...	...	...	
18	(c)	Jodhpur-Hyderabad (British section).	J. H.		18-9-92	3′ 3½″	...	123·98	...	...	...	...	...	...	...	The Native State section of this railway forms an integral portion of the Jodhpur railway.
38	(a)	Jorhat . . .	J.	Jorhat Ry. . .	15-12-84	2′ 0″	30·25	...	...	...	...	...	...	...	...	
1	(b)	Jubbulpore-Gondia Extension.	J. G. E.	Bengal-Nagpur Ry. Co.	18-4-03	2′ 6″	...	228·77	...	...	...	...	...	...	...	
		K													●	
30	(a)	Kalka-Simla .	K. S.	Delhi-Umballa-Kalka Ry. Co.	9-11-03	2′ 6″	...	...	...	59·44	...	...	...	...	...	Government land provided free.
31	(b)	Karaikkal-Peralam	K. P.	South Indian Ry. Co.	14-3-98	3′ 3½″	...	...	...	...	...	...	...	...	14·65	
9	(g)	Khushalgarh-Kohat-Thal.	K. K.T.	North Western State Ry.	25-5-03	2′ 6″	21·73	...	...	...	...	...	...	...	...	
6	(b)	Kolar Gold-fields .	K. G.	Madras Ry. Co. .	1-6-04	5′ 6″	...	...	...	...	...	...	9·68	...	...	
23	(g)	Kolhapur . .	K. L.	Southern Marhatta Ry. Co.	21-4-91	3′ 3½″	...	...	...	...	...	...	29·27	...	...	
		L														
17	(b)	Ledo and Tikak-Margherita Colliery.	L. T.	Assam Railways and Trading Co.	17-2-04	3′ 3½″	...	...	...	...	8·50	...	...	...	...	
20	(b)	Lucknow-Bareilly .	L. B.	Rohilkund and Kumaon Ry. Co.	12-10-84	3′ 3½″	...	237·04	...	...	...	...	...	...	...	
9	(c)	Ludhiana-Dhuri-Jakhal.	L. D. J.	North Western State Ry.	10-4-01	5′ 6″	...	...	...	...	...	...	...	78·66	...	
		M														
6	(a)	Madras . .	M.	Madras Ry. Co.	1-7-56	5′ 6″	...	...	904·01	...	...	...	...	...	...	Guaranteed under old contract.
6	(c)	Madras (North-East line).	M.N.E.		20-3-93	5′ 6″	...	497·19	...	...	...	...	...	...	...	Includes 2·66 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bezwada and Kistna Block hut and 0·31 mile of 3′ 3½″ gauge line between Kistna Block hut and Tadepalli.
19	(a)	Morvi . .	M.B.W.	Morvi Ry.. .	11-3-86	3′ 3½″	...	...	...	...	...	73·94	...	...	...	
1	(c)	Mourbhanj . .	M.B.	Bengal-Nagpur Ry. Co.	24-3-87 20-1-05	2′ 6″ 2′ 6″	... ...	... ...	... ...	... ...	... ...	15·70 ...	... 32·41	... ...	... ...	
3	(c)	Mymensingh-Jamalpur-Jagannathganj.	M.J.J.	Eastern Bengal State Ry.	15-10-98	3′ 3½″	...	...	...	50·69	...	...	...	...	...	Rebate line.
23	(b)	Mysore-Nanjangud	M.N.	Southern Maharatta Ry. Co.	1-12-91	3′ 3½″	...	...	...	...	...	...	15·80	...	...	
22	(a)	Mysore Section (Southern Mahratta).	M.S.		1-2-81	3′ 3½″	...	296·23	...	...	...	...	...	...	...	
		N														
2	(c)	Nagda-Ujjain .	N. U.	Bombay, Baroda and Central India Ry Co.	15-7-96	5′ 6″	...	...	...	...	...	...	34·32	...	...	
6	(d)	Nilgiri . .	N.	Madras Ry. Co. .	15-6-99	3′ 3½″	...	16·99	...	...	...	...	...	...	...	
8	(a)	Nizam's Guaranteed State.	N. G. S.	Nizam's Guaranteed State Rys. Co.	9-10-74	5′ 6″	...	...	...	...	...	...	33·0·14	...	...	Includes 5·82 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Hyderabad and Secunderabad over which the Hyderabad-Godavari Valley railway trains also work.
11	(b)	Noakhali (Bengal)	N. B.	Assam-Bengal Ry. Co.	15-6-03	3′ 3½″	...	...	...	34·90	...	...	...	...	...	Rebate line.
9	(e)	North Western State.	N. W.	North Western State Ry.	13-5-01	5′ 6″	3,268·85	...	...	...	...	...	...	...	...	Includes 5·63 miles of military line not used for public traffic and 26·23 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bhatinda and Kot Kapura, over which the Rajputana-Malwa railway trains also work.
9	(h)	Nowshera-Dargai .	N. D.		1-1-01	2′ 6″	40·25	...	...	...	...	...	...	...	...	
		O														
10	(c)	Oudh and Rohilkhand State.	O. & R.	Oudh and Rohilkhand State Ry.	23-4-67	5′ 6″	1,165·05	...	...	...	...	...	...	...	...	Includes 16·79 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Barhwal and Bara Banki and 0·59 mile on the Cawnpore Bridge and 1·81 miles of 3′ 3½″ gauge, between the Oudh and Rohilkhand State railway cantonment and the Bengal and North-Western railway city station at Benares.
					Carried	over .	5,916·89	10,002·80	1,440·40	1,712·59	8·50	1,266·19	1,638·23	128·24	14·65	

APPENDIX 1—*concld.*

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		P			Brought forward.		5,916·89	10,002·80	1,440·40	1,712·59	8·50	1,366·19	1,638·23	128·24	14·85	
2	(b)	Palanpur-Deesa	P. D.	Bombay, Baroda and Central India Ry. Co.	8-11-03	3′ 3½″	...	17·28	...	...	...	...	...	...	...	
1	(d)	Parlakimedi Light	P.L.L.	Bengal-Nagpur Ry. Co.	1-4-00	2′ 6″	...	...	...	...	...	...	24·63	...	...	
2	(d)	Petlad-Cambay (Anand-Tarapur section).	P.C.A.	Bombay, Baroda and Central India Ry. Co.	5-5-90	5′ 6″	...	...	...	...	...	...	21·50	...	...	
2	(e)	Petlad-Cambay (Tarapur-Cambay section).	P.C.T.		20-6-01	5′ 6″	...	...	...	...	...	...	10·92	...	...	
21	(c)	Pondicherry	P.	South Indian Ry. Co.	15-12-79	3′ 3½″	...	...	...	...	...	...	...	...	7·85	
20	(c)	Powayan Light	P.W.L.	Rohilkund and Kumaon Ry. Co.	17-6-90	2′ 6″	...	...	...	39·50	...	...	...	...	...	Government land provided free.
		R														
1	(c)	Raipur-Dhamtari	R. D.	Bengal-Nagpur Ry. Co.	10-9-09	2′ 6″	...	56·24	...	...	...	...	...	...	...	
2	(c)	Rajpipla	R.	Bombay Baroda and Central India Ry. Co.	1-7-97	2′ 6″	...	...	...	...	...	...	37·37	...	...	
9	(d)	Rajpura-Bhatinda	R. B.	North Western State Ry.	1-11-84	5′ 6″	...	...	...	...	...	...	...	107·06	...	
2	(l)	Rajputana-Malwa	R. M.	Bombay, Baroda and Central India Ry. Co.	14-2-73	3′ 3½″	...	1,782·38	...	...	...	...	...	...	...	Includes 2·10 miles, 3·07 miles and 0·94 mile laid on the 5′ 6″ gauge at Ujjain, between Agra cantonment and Agra East Bank stations and from Lahori Gate cabin to Brewery cabin at Delhi, respectively, and 26·28 miles of mixed (5′ 6″ and 3′ 3½″) gauge line between Bhatinda and Kot Kapura over which the North Western State railway trains also work.
20	(a)	Rohilkund and Kumaon	R. & K.	Rohilkund and Kumaon Ry. Co.	12-10-64	3′ 3½″	...	...	...	53·92	...	...	...	...	...	Subsidized by the Government of India.
		S														
6	(c)	Shoranur-Cochin	S. C.	Madras Ry. Co.	2-6-02	3′ 3½″	...	...	...	...	...	...	64·75	...	...	
4	(c)	South Behar	S. B.	East Indian Ry. Co.	5-7-99	5′ 6″	...	...	...	73·76	...	...	...	...	...	Rebate line.
21	(a)	South Indian	S. I.	South Indian Ry. Co.	15-7-61	3′ 3½″	...	1,123·05	...	...	...	...	...	...	...	
22	(a)	Southern Mahratta	S. M.	Southern Mahratta Ry. Co.	24-3-84	3′ 3½″	...	1,042·04	...	...	...	...	...	...	...	
9	(c)	Southern Punjab	S. P.	North Western State Ry.	10-11-27	5′ 6″	...	...	...	425·33	...	...	...	...	...	Rebate line.
9	(f)	Southern Punjab Extension	S. P. E.		10-6-05	5′ 6″	...	...	...	77·05	...	...	...	...	...	
		T														
21	(d)	Tanjore District Board	T. D. B.	South Indian Ry. Co.	2-4-94	3′ 3½″	...	...	...	99·46	...	...	...	...	...	
3	(f)	Tapti Valley	T. V.	Bombay, Baroda and Central India Ry. Co.	1-12-98	5′ 6″	...	...	...	155·48	...	...	...	...	...	Rebate line.
32	(a)	Tarakeshwar-Magra Light	T. P.	Bengal Provincial Light Ry. Co.	7-11-94	2′ 6″	...	...	...	...	33·27	...	...	...	...	
4	(d)	Tarkessur	T.	East Indian Ry. Co.	1-1-85	5′ 6″	...	...	...	22·23	...	...	...	...	...	Government land provided free.
33	(a)	Tezpore-Balipara Light	T. B.	Tezpore-Balipara Light Ry. Co.	9-8-94	2′ 6″	...	...	...	20·10	...	...	...	...	...	Subsidized by District Board.
34	(a)	Thaton-Duyinzaik Light	T. D.	Thaton-Duyinzaik Light Ry. Co.	11-3-85	2′ 6″	...	...	...	7·76	...	...	...	...	...	Subsidized by Local Government.
21	(e)	Tinnevelley-Quilon (Travancore) (British section).	T. Q. B.	South Indian Ry. Co.	1-6-02	3′ 3½″	...	50·48	...	...	...	...	...	...	...	
21	(f)	Tinnevelly-Quilon (Travancore) (Native State section)	T. Q. N.		1-8-03	3′ 3½″	...	...	...	...	...	...	57·98	...	...	
32	(b)	Tirhoot State	T. S.	Bengal and North-Western Ry. Co.	1-11-75	3′ 3½″	...	565·45	...	...	...	...	...	...	...	
6	(f)	Tirupattur-Krishnagiri	T. K.	Madras Ry. Co.	18-9-05	2′ 6″	...	25·38	...	...	...	...	...	...	...	
		U														
33	(a)	Udaipur-Chitor	U. C.	Udaipur-Chitor Ry.	1-8-95	3′ 3½″	...	...	...	...	...	67·30	...	...	...	
		V														
2	(m)	Vijapur-Kalol-Kadi	V.K.K.	Bombay, Baroda and Central India Ry. Co.	10-6-02	3′ 3½″	...	...	...	...	...	...	41·37	...	...	
		W														
22	(f)	West of India Portuguese	W. I. P.	Southern Mahratta Ry. Co.	17-1-87	3′ 3½″	...	...	...	...	...	...	...	...	51·10	
		Total mileage of railways open in India and Burma on the 31st December 1905.				5′ 6″	4,931·85	6,823·36	1,440·40	921·21	...	...	709·94	201·69	...	
						3′ 3½″	761·60	7,531·35	...	1,443·74	8·50	1,305·93	814·38	...	73·60	
						2′ 6″	187·01	310·39	...	109·29	33·27	27·56	189·89	33·60	...	
						2′ 0″	36·43	...	...	107·94	...	...	185·53	...	...	
						Total...	5,916·89	14,665·10	1,440·40	2,692·18	41·77	1,333·49	1,899·74	235·29	73·60	

APPENDIX 2.

Mileage added to the Railway System of India during the Calendar year 1905 and the four months following.

Number.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1905.	Date of opening for traffic.	Additions, in miles, made to open mileage during 1905.				Total mileage added to railway administration.			
						Length.							
Main head.	Sub-head.					5′ 6″	3′ 3½″	2′ 6″	2′ 0″	5′ 6″	3′ 3½″	2′ 6″	2′ 0″
1	(b)	Bengal-Nagpur.	Jubbulpore-Gondia Extension.	Burgi to Howbagh Jabalpur.	7th April 1905	...	...	16·16	...				
				Howbagh Jabalpur to Jubbulpore.	15th September 1905.	...	...	1·69	...				
	(c)		Mourbhanj ...	Rupsa to Baripada ...	20th January 1905.	...	...	32·41	...	...	...	49·66	...
2	(j)	Bombay, Baroda and Central India.	Jaipur (Siwai Madhopur)	Sanganer to Nawai ...	10th November 1905.	...	32·18	...	...				
	(l)		Rajputana-Malwa.	Phulera to Narnaul ...	18th May 1905.	...	100·53	...	...	...	132·71	...	...
3	(a)	Eastern Bengal State.	Eastern Bengal State.	Ranaghat to Jiaganj ...	15th April 1905	31·35	...	...	...				
				Jiaganj to Bhagwangola ...	15th May 1905	7·50	...	...	...				
				Bhagwangola to Lalgola ...	10th November 1905.	5·90	...	...	...				
	(b)		Eastern Bengal State.	Bonarpara to Kaunia ...	1st July 1905...	...	44·47	...	...	94·75	41·47	...	...
4	(a)	East Indian ...	East Indian...	Etmadpur chord.	1st September 1905.	1·11	...	...	...				
				Shikohabad to Mainpuri ...	1st March 1905	29·71	...	...	...				
				Maiupuri to Bhongaon ...	17th August 1905.	8·63	...	...	...	39·45	...	...	...
5	(b)	Great Indian Peninsula.	Agra-Delhi Chord.	Delhi Sadr to Delhi Junction.	1st March 1905	0·43	...	...	...				
	(f)		Indian Midland.	Cawnpore General ganj line	1st March 1905.	0·50	...	...	...				
				Centre of Agra Road station to point of junction with the Balinganj branch.	1st March 1905.	0·27	...	...	...				
				Portion of Balinganj branch	1st March 1905	2·10	...	...	...	3·20	...	...	...
6	(f)	Madras ...	Tirupattur-Krishnagiri.	Tirupattur to Krishnagiri.	18th September 1905.	...	...	25 38	..	...	...	25·38	...
9	(a)	North Western State.	North Western State.	Spezand junction to Nushki.	15th November 1905.	63·29	...	...	...				
	(f)		Southern Punjab "Ludhiana" Extension.	Ludhiana to Ferozepore Cantonment.	10th June 1905	77·05	...	...	...	160·34	...	...	...
10	(a)	Oudh and Rohilkhand State.	Oudh and Rohilkhand State.	Phaphamau to Allahabad...	1st January 1905.	7·00	...	...	...	7·00	...	...	...
12	(a)	Bengal and North-Western.	Bengal and North-Western.	New entrance of the Tulsipur branch into Gonda.	1st July 1905...	...	0·95	...	...				
				Uska Bazar to Barhni ...	5th January 1905.	...	31·00	...	...				
	(b)		Tirhoot. ...	Sakri to Jaynagar ...	14th January 1905.	....	30·47	...	...	...	62·42	...	...
18	(a)	Jodhpur-Bikaner.	Jodhpur.	Merta Road to Merta City	17th January 1905.	...	8·95	...	...	...	8·95	...	...
22	(b)	Southern Mahratta.	Bellary-Rayadrug.	Bellary to Rayadrug ...	1st July 1905...	...	33·35	...	...				
	(f)		Hospet-Kottur	Hospet to Kottur ...	1st April 1905	...	43 06	...	...	...	76 41	...	...
24	(a)	Baraset-Basirhat Light.	Baraset-Basirhat Light.	Baraset to Basirhat ...	1st February 1905.	...	...	26·06	...	...	...	26·06	...
25	(a)	Barsi Light ...	Barsi Light ...	Barsi Town to Kuslamb ...	15th June 1905	...	...	6·34	...	...	...	6·34	...
27	(a)	Cutch ...	Cutch ...	Anjar to Tuna ...	15th May 1905	...	...	11·86	...	...	...	11·86	...
					Total mileage added during 1905 ...					304·84	324·96	119·30	...

APPENDIX 2—*concld.*

Mileage added to the Railway System of India during the Calendar year 1905 and the four months following.

Number.		Railway administration to which railway has been added.	Name of owning railway.	Section of line added during 1905.	Date of opening for traffic.	Additions, in miles, made to open mileage during 1905.							
						Length.				Total mileage added to railway administration.			
Main head.	Sub-head.					5′ 6″	3′ 3¾″	2′ 6″	2′ 0″	5′ 6″	3′ 3¾″	2′ 6″	2′ 0″
				MILEAGE ADDED FROM THE 1ST JANUARY TO THE 31ST MARCH 1906.									
1	(b)	Bengal-Nagpur	Jubbulpore-Gondia Extension.	Chhindwara to Khirsadoh	15th March 1906.	...	...	16·28	...	...	...	16·28	...
2	(e)	Bombay, Baroda and Central India.	Petlad-Cambay (Tarapur-Cambay section.)	Cambay to Cambay Bandar.	1st March 1906.	1·39	...	...	...	1·39	...	...	...
3	(b)	Eastern Bengal State.	Eastern Bengal State.	Golokganj to Kokrajhar ...	1st February 1906.	...	35·75	...	...	...	35·75	...	...
4	(a)	East Indian ...	East Indian ...	Bhongaon to Farukhabad ..	1st January 1906.	27·49	...	...	...	27·49	...	...	...
5	(b)	Great Indian Peninsula.	Agra-Delhi Chord.	Kosi to Sanket ...	24th February 1906.	6·06	...	...	...	6·06	...	...	...
6	(i)	Madras.	Morappur-Dharmapuri.	Morappur to Dharmapuri...	18th January 1906.	...	...	18·14	...	...	...	18·14	...
9	(f)	North-Western State.	Southern Punjab "Ludhiana" Extension.	Ferozepore City to MacLeod Ganj.	10th February 1906.	77·45	...	...	...	77·45	...	...	...
11	(a)	Bengal and North-Western.	Bengal and North-Western.	Barkni to Tulsipur ...	15th January 1906.	...	22·54	...	...				
	(b)		Tirhoot.	Bettiah to Narkatiaganj ...	17th January 1906.	...	22·75	...	...				
				Bhagalpur-Kachori to Barari.	15th March 1906.	...	3·50	...	...				
				Narkatiaganj to Bhikna Thoree.	17th February 1905.	...	21·50	...	...	...	70·29	...	...
20	(a)	Rohilkund and Kumaon.	Rohilkund and Kumaon.	Bareilly to Soron ...	29th January 1906.	...	56·00	...	...	...	56·00	...	...
				Total mileage added from 1st January to 31st March 1906 ...						112·39	162·04	34·42	...
				MILEAGE ADDED FROM 1ST TO 30TH APRIL 1906.									
12	(a)	Bengal and North-Western.	Bengal and North-Western.	Gainsari to Jarwa ...	12th April 1906	...	12·56	...	...	...	12·56	...	...
				Grand Total Mileage open on the 30th April 1906 ...						15,140·84	12,133·70	1,014·43	327·90

APPENDIX 3.

Total Railway mileage opened for traffic during and at the end of each year, and the total mileage opened during the Viceroyalty of each Governor General.

Calendar year.	Net mileage added during the year.	Total mileage open for traffic at close of the year.	Total mileage opened during Viceroyalty.	Viceroys.
1853	20	20	169	Marquis of Dalhousie.
1854	51	71		
1855	98	169		
1856	103	272	1,418	Earl Canning.
1857	15	287		
1858	140	427		
1859	198	625		
1860	213	838		
1861	749	1,587		
1862	746	2,333	920	Earl of Elgin.
1863	174	2,507		
1864	451	2,958	1,501	Lord Lawrence.
1865	405	3,363		
1866	200	3,563		
1867	366	3,929		
1868	79	4,008		
1869	247	4,255	1,066	Earl of Mayo.
1870	516	4,771		
1871	303	5,074		
1872	295	5,369	1,467	Lord Northbrook.
1873	328	5,697		
1874	529	6,226		
1875	315	6,541		
1876	319	6,860	2,621	Lord Lytton.
1877	460	7,320		
1878	899	8,219		
1879	275	8,494		
1880	668	9,116		
1881	728	9,890	2,469	Marquis of Ripon.
1882	259	10,149		
1883	309	10,458		
1884	1,173	11,631		
1885	652	12,283	2,945	Earl of Dufferin and Ava.
1886	609	12,892		
1887	1,211	14,103		
1888	473	14,576		
1889	1,311	15,887	3,928	Marquis of Lansdowne.
1890	514	16,401		
1891	907	17,308		
1892	507	17,815		
1893	689	18,504		
1894	396	18,900	3,536	Earl of Elgin.
1895	647	19,547		
1896	707	20,254		
1897	861	21,115		
1898	925	22,040		
1899	1,483	23,523	6,255	Lord Curzon.
1900	1,229	24,752		
1901	611	25,363		
1902	568	25,931		
1903	1,025	26,956		
1904	609	27,565		
1905	730	28,295		

APPEN

Capital authorized to be raised for each Guaranteed railway, State line leased to companies, and rail
31st Decem

Number. Main head.	Number. Sub-head.	Railways.	Amount authorized to be raised by the Companies up to the 31st December 1905. Share Capital.	Debentures.	Debenture stock.	Total.	Amount raised by the Companies and Tary of State in England to the. Share Capital. Rate of interest per cent.	Share Capital. Amount.	Debentures. Cash received.
		Guaranteed.	£	£	£	£		£	£
2	(a)	Bombay, Baroda and Central India	7,550,300	2,391,300	...	9,941,600	5	7,528,628	2,389,299
6	(a)	Madras	10,257,630	2,295,800	...	12,553,430	5 4½ 4¾	8,757,670 929,960 500,000	2,292,663
		Total	17,807,930	4,687,100	...	22,495,030	...	17,786,258	4,681,962
		State lines leased to Companies.							
1	(a) (b) & (c)	Bengal-Nagpur	3,000,000	1,900,000	...	4,900,000	4	3,000,000	1,893,015
		Do. Extensions	...	3,650,000	...	3,650,000	...	...	3,597,196
5	(f)	Indian Midland	3,000,000	3,654,100	...	6,654,100	4	3,000,000	3,646,431
11	(a)	Assam-Bengal	1,500,000	1,355,900	...	2,855,900	3	1,500,000	1,352,525
15	(a)	Burma	2,000,000	...	1,250,000	3,250,000	2½	2,000,000	...
20	(b)	Lucknow-Bareilly section (Rohilkund and Kumaon)	...	147,000	...	147,000	...	...	160,837
22	(a)	Southern Mahratta	3,500,000	1,215,000	...	4,715,000	3½	3,491,540	1,213,863
22	(i)	Mysore section (Southern Mahratta)	...	...	1,200,000	1,200,000	...	...	...
		Total	13,000,000	11,922,000	2,450,000	27,372,000	...	12,991,540	11,663,867
		Branch lines.							
2	(g)	Ahmedabad-Dholka	86,667	...	...	86,667	...	...	...
2	(h)	Ahmedabad-Parantij	133,333	...	...	133,333	...	...	...
10	(b)	Hardwar-Dehra	200,000	...	...	200,000	...	...	...
3	(c)	Mymansingh-Jamalpur-Jagannathganj	149,620	...	...	149,620	...	...	...
4	(c)	South Behar	400,000	...	290,000	690,000	...	379,580	...
2	(f)	Tapti Valley	993,333	...	40,000	1,033,333	...	...	...
		Total	1,962,953	...	330,000	2,292,953	...	379,580	...
		Grand total	32,770,883	16,609,100	2,780,000	52,159,983	...	31,157,378	16,345,829

Details of Debenture loans on 31st December 1905 and the dates at which the loans expire.

Bombay, Baroda and Central India Railway—

£		
149,400	3½ per cent.	15th June 1906.
180,000	3½ „ „	10th July 1906.
100,500	3½ „ „	8th January 1907.
320,000	3½ „ „	10th January 1907.
500,000	3½ „ „	30th June 1907.
67,000	3¾ „ „	1st April 1908.
198,800	3¼ „ „	8th July 1908.
300,000	3¾ „ „	7th November 1908.
300,000	3½ „ „	1st January 1909.
55,000	3½ „ „	5th May 1910.
100,600	3 „ „	6th July 1910.
120,000	3¼ „ „	1s February 1911.
2,391,300		

Madras Railway—

£		
111,500	3 per cent.	30th June 1906.
140,000	3½ „ „	30th June 1906.
145,000	3¾ „ „	31st December 1906.
100,000	3¾ „ „	30th April 1907.
54,200	3¾ „ „	30th June 1907.
200,000	3½ „ „	31st October 1907.
81,400	3½ „ „	31st December 1907.
53,300	3½ „ „	31st December 1907.
174,400	3½ „ „	30th June 1909.
62,300	3¼ „ „	30th June 1910.
300,000	3 „ „	1st August 1910.
80,000	3 „ „	31st December 1910.
500,000	3½ „ „	19th May 1911.
293,700	3¼ „ „	30th June 1911.
2,295,300		

DIX 5.

ways constructed under the "Branch line" terms, the amount raised and the amount withdrawn to ber 1905.

ADVANCED BY THE SECRE- 31st DECEMBER 1905.			AMOUNT RAISED IN INDIA TO THE 31st DECEMBER 1905.				TOTAL AMOUNT WITH- DRAWN TO THE 31st DECEMBER 1905.		REMARKS.
Debenture stock. Cash received.	Capital not bearing interest (premium).	Advances made to companies from money raised under Act 51, Vict., Cap. 5.	Share Capital.	Debenture stock.	Capital not bearing interest (premium).	Total amount raised to the 31st December 1905.	During calendar year 1905.	Up to the close of calendar year 1905.	
£	£	£	£	£	£	£	£	£	
...	28,883	899,775	21,672	...	...	10,868,257	50,195	11,007,096	
...	8,524	...	...	...	...	12,558,817	122,449	12,479,210	
...	37,407	899,775	21,672	...	...	23,427,074	172,644	23,486,308	
...	8,150	2,760,000	...	...	...	7,661,165	35,250	7,961,998	
...	9,420	...	...	...	...	3,606,646	760,559	9,037,980	
...	—5,977	1,495,000	...	...	...	8,135,454	60,493	8,725,114	
...	15,385	...	...	...	...	2,867,910	—1,125	2,867,910	
1,199,819	...	...	...	...	...	3,199,819	143,877	3,667,292	
...	—735	...	...	...	...	160,102	5,690	470,472	
...	30,923	2,129,900	8,460	...	34	6,874,720	165,267	6,956,398	
1,200,000	24,000	...	...	...	...	1,224,000	16,375	*1,231,185	*The Mysore Durbar has deposited £23,490 towards the share of Joint Shares on the Southern Mahratta Railway books chargeable against the capital of the Mysore Railway.
2,399,819	81,196	6,384,900	8,460	...	34	33,729,816	1,186,386	40,918,349	
...	...	...	73,280	...	...	73,280	1,846	69,666	
...	...	...	130,000	...	2,667	132,667	180	132,733	
...	...	...	194,867	...	...	194,867	510	194,710	
...	...	...	160,030	...	...	160,030	2,328	159,069	
290,000	15,000	...	...	...	...	684,530	282	735,336	
...	...	...	833,334	39,203	17	872,554	440	872,242	
290,000	15,000	...	1,391,511	39,203	2,684	2,117,978	5,586	2,163,806	
2,689,819	133,603	7,284,675	1,421,643	39,203	2,718	59,274,868	1,364,616	66,568,463	

Bengal-Nagpur Railway—

£		
400,000	3 per cent.	15th June 1906.
109,300	3½ „ „	10th July 1906.
390,700	3½ „ „	10th January 1907.
448,900	3½ „ „	18th February 1907.
155,000	3½ „ „	3rd January 1908.
400,000	3½ „ „	4th May 1908.
265,600	3½ „ „	18th February 1909.
400,000	3½ „ „	21st April 1909.
750,000	3½ „ „	1st June 1909.
783,500	3½ „ „	16th February 1910.
400,000	3 „ „	18th August 1910.
600,000	3½ „ „	31st January 1911.
400,000	3½ „ „	5th May 1911.
5,505,000		

Lucknow-Bareilly Railway—

£		
32,000	3½ per cent.	1st July 1910.
115,000	3½ „	1st July 1911.
147,000		

Indian Midland Railway—

£		
582,900	3½ per cent.	30th June 1906.
390,000	3½ „ „	31st December 1906.
610,000	3½ „ „	30th June 1907.
421,200	3½ „ „	31st December 1907.
500,000	3½ „ „	3rd October 1908.
257,500	3½ „ „	30th June 1910.
150,000	3 „ „	30th June 1910.
742,500	3½ „ „	30th June 1911.
3,654,100		

Southern Mahratta Railway—

£		
600,000	3 per cent.	1st April 1906.
50,000	3½ „ „	1st October 1907.
100,000	3½ „ „	1st April 1908.
255,000	3½ „ „	1st October 1908.
100,000	3½ „ „	31st May 1909.
100,000	3 „ „	11th April 1910.
10,000	3 „ „	1st October 1910
1,215,000		

Assam-Bengal Railway—

£		
560,000	3½ per cent.	4th July 1907.
495,900	3½ „ „	4th July 1909.
300,000	2½ „ „	13th April 1910.
1,355,900		

APPEN

Capital expenditure in thousands of rupees

Number.	Railways (including branches worked).	EXPENDITURE ON NEW LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.									
		YEARS.									
		1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
	Bengal Central	...	...	...	...	...	...	...	...	...	*
1 (a) to (e) and (g).	Bengal-Nagpur	62,32	1,71,83	1,71,20	1,67,01	79,14	40,25	1,42,51	1,17,84	1,02,23	66,63
2 (a) to (f) & (n) & (o).	Bombay, Baroda and Central India	18,76	16,82	49,86	60,95	24,05	13,72	9,76	23,43	7,56	1,02
3	Eastern Bengal State	4	3,00	13,89	29,15	31,10	40,07	35,32	30,58	38,18	37,15
4	East Indian	18,06	80,80	1,07,94	68,09	39,09	33,15	28,67	48,89	91,17	1,26,85
5	Great Indian Peninsula	27,30	65,88	80,87	67,71	18,77	2,19	4,12	26,43	69,16	16,17
6 (a) to (f) & (g) & (i).	Madras	24,41	10,91	7,47	11,38	20,80	54,50	39,56	60,42	37,51	47,77
7	Nagda-Muttra	...	...	...	...	...	...	...	...	1,75	21,89
8	Nizam's Guaranteed State	...	15,32	40,79	78,37	37,06	...	...	...	...	...
9 (a) to (f)	North Western State	2,13,51	1,26,86	62,24	41,82	41,48	54,63	49,91	30,87	1,21,56	1,92,78
10	Oudh and Rohilkhand State	23,03	39,38	23,72	39,27	27,17	9,30	20,61	54,52	30,78	29,13
11	Assam-Bengal	1,11,06	1,09,69	1,35,82	1,05 81	97,65	88,10	71,84	45,68	13,59	62
12	Bengal and North-Western	32,03	1,04,74	62,86	70,90	28,89	30,86	26,15	12,63	46,76	45,07
13	Bengal Dooars	...	72	1,86	7,98	18,19	15,61	15,56	8,50	...	...
14	Bhavnagar-Gondal-Junagad-Porbandar	9,24	9,30	5,43	...	...	...	...	...	...	...
15	Burma	43,40	39,67	43,29	62,52	50,63	56,42	35,77	...	3,39	42,25
16	Deoghur	...	...	...	...	...	...	...	...	...	...
17	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...
18	Jodhpur-Bikaner	23	10,04	26,40	4,86	6,61	4,00	6,77	...	89	1
19	Morvi	...	...	...	...	2,32	11	3	85	†6,24	7,18
(g) to (m)	Rajputana-Malwa	18,44	12,09	8,58	2,67	59	21	1,07	5,63	35,80	26,36
20	Rohilkund and Kumaon	4	...	...	...	...	3	43	83	9,74	33,18
21	South Indian	53	5,19	—21,05	2,70	14,00	36,50	73,39	56,12	27,81	7,14
22	Southern Mahratta	...	...	...	...	...	...	...	2,56	12,60	2,78
23	Udaipur-Chitor	18	26	1,13	2,16	45	21	...	...	...	...
24	Baraset-Basirhat Light	...	...	...	...	...	...	...	...	5,69	1,33
25	Barsi Light	...	...	...	...	...	...	...	...	23	7,92
26	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	5,30	...	...
27	Cutch	...	...	...	...	...	...	...	92	1,35	...
28	Dholpur-Bari	...	...	...	...	...	...	...	...	...	2,04
29	Dwara-Therria Light	...	...	...	...	...	...	...	8,24	1,39	82
30	Kalka-Simla	...	...	...	3,39	4,51	23,53	49,99	50,99	21,40	4,34
31	Ranaghat-Krishnagar Light	...	1,01	5,01	5	...	...	...	...	‡	...
32	Tarakeshwar-Magra Light	...	...	...	...	...	...	...	16	...	...
33	Tezpore-Balipara Light	...	...	...	...	...	...	...	...	...	...
35	Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...
36	Howrah-Amta Light	3,62	4,01	29	5	1	8	...	20	2,79	...
37	Howrah-Sheakhala Light	1,31	2,81	33	...	...	...	...	...	...	...
38	Jorhat	...	...	...	...	...	...	...	...	...	...
	TOTAL	6,07,51	8,30,33	8,27,93	8,26,84	5,42,51	5,03,52	6,11,46	5,91,89	6,89,57	7,22,43

DIX 7.

during each of the past 10 years.

EXPENDITURE ON ROLLING-STOCK IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.										
YEARS.										REMARKS.
1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	
...	11,59	4,37	1,95	27	3	4	15	...	*	* Purchased by the State from the 1st July 1905 and incorporated with the 5' 6" gauge section of the Eastern Bengal State Railway [3(a)]
2,26	32	1,13	33,92	27,35	4,29	57,16	34,13	40,64	57,18	
2,08	24	6,00	13,84	13,34	4,24	2,51	7,97	3,26	1,48	
7,30	16,63	10,52	18,21	4,57	13,01	18,12	35,25	15,25	25,14	
12,02	27,27	36,32	1,06,52	64,34	73,57	54,29	17,91	26,98	30,13	
2,40	7,85	1,63	8,27	18,36	21,27	12,27	31,84	37,89	12,63	
1,65	6,57	1,47	3,66	3,26	10,11	25,43	16,44	6,24	7,49	
...	...	...	...	...	...	...	...	...	...	
2,22	49	3,06	12,80	12,67	1,52	5,86	3,05	72	51	
10,63	36,32	21,85	5,70	79	12,30	22,21	14,34	13,91	28,56	
59	3,51	7,06	5,68	79	5,85	17,93	23,91	7,58	6,92	
16,29	4,35	2,65	1,63	87	3,05	7,69	9,86	6,32	4,79	
2,25	9,98	24,03	15,84	18,58	18,47	12,49	18,33	3,48	14,09	
1	52	1	4,09	2,32	1,40	7	25	5	...	
1,80	87	1,24	8	16	80	35	55	—1,05	...	
8,80	1,50	6,36	11,96	4,74	20,85	26,60	19,57	12,20	6,64	
...	...	...	...	...	...	...	...	...	...	
78	14	20	16	2,52	1,13	...	9	4,47	19	
39	...	6,08	14,14	22	2,22	1,95	4,22	1,36	71	
24	2	12	4	6	10	—12	—22	...	3,00	†Represents Expenditure on conversion of the existing line from 2' 6" to 3' 3½" gauge.
2,15	—12	—1,59	3,07	1,83	89	8,70	8,19	3,35	10,09	
18	2	2,42	1,02	3,39	2,06	6,86	6,11	1,32	77	
29	1,22	43	73	26	—3	1,46	2,96	1,27	14,75	
45	1,40	5,34	3,42	1,44	1,88	26	85	85	18,58	
...	2,25	5	...	...	42	...	...	...	...	
...	...	...	...	...	...	...	...	2,05	...	
2,49	1,77	27	...	...	—39	...	...	...	76	
...	...	...	...	...	...	...	2,17	23	...	
...	...	...	...	...	...	...	12	12	10	
...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	50	
...	...	...	...	...	...	1,07	3,93	2,85	4,96	
...	...	1,20	...	24	...	...	...	‡	...	‡ Purchased by the State from the 1st July 1904 and incorporated with the Eastern Bengal State Railway.
...	...	1	18	...	...	...	1	1	8	
18	...	6	12	...	...	...	...	...	...	
24	2	—25	54	—16	1	9	41	70	12	
1,08	1,26	99	11	46	...	72	...	80	...	
...	1,17	48	...	...	...	...	3	...	...	
—7	38	20	...	...	—31	4	12	2	...	
78,70	1,37,44	1,43,71	2,67,68	1,77,67	1,98,73	2,84,05	2,62,54	1,92,38	2,60,17	

Capital expenditure in thousands of rupees

Number.	Railways (including branches worked).	EXPENDITURE ON IMPROVEMENT OF EXISTING LINES IN THOUSANDS OF RUPEES EXCLUDING VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.									
		YEARS.									
		1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
	Bengal Central	69	86	2,15	75	1,66	1,18	1,15	73	43	...
1 (a) to (e) & (g).	Bengal-Nagpur	10,08	3,56	57	25	1,68	3,37	1,61	3,58	5,66	5,20
2 (a) to (f) & (n) & (o).	Bombay, Baroda and Central India	23,86	28,88	15,33	36,60	8,42	21,74	9,89	5,71	4,83	2,74
3	Eastern Bengal State	18,06	27,03	7,64	8,72	13,85	11,37	15,46	23,86	49,13	1,08,73
4	East Indian	15,75	19,82	28,96	40,78	48,92	64,24	58,69	41,88	46,44	63,82
5	Great Indian Peninsula	6,09	4,37	8,04	6,75	10,28	11,65	17,04	23,56	6,479	73,48
6 (a) to (f) & (g) & (i).	Madras	4,07	3,30	3,16	2,43	3,93	9,33	4,56	5,91	14,26	13,47
7	Nagda-Muttra	...	...	...	...	...	...	...	...	...	...
8	Nizam's Guaranteed State	82	3,15	1,24	—1,05	2,78	6,53	8,14	3,76	2,97	2,76
9 (a) to (j)	North Western State	30,47	28,30	18,92	20,58	19,10	14,67	48,44	22,42	30,94	33,14
10	Oudh and Rohilkhand State	2,61	4,01	4,38	9,74	8,30	9,45	12,75	12,40	19,80	19,62
11	Assam-Bengal	...	...	...	...	...	...	...	...	...	12,03
12	Bengal and North-Western	49	2,86	5,05	6,63	12,21	7,19	25,66	21,79	29,04	16,81
13	Bengal Dooars	84	1,08	53	38	16	2	5	21	5,55	3,54
14	Bhavnagar-Gondal-Junagad-Porbandar	1,03	73	2,10	91	31	16	40	3	3	24
15	Burma	17,27	6,24	5,09	11,31	25,14	22,05	7,91	20,35	21,11	17,60
16	Deoghur	...	...	1	—1	...	...	...	...	...	23
17	Dibru-Sadiya	—25	2,41	7	...	6	7,20	23	32	22	27
18	Jodhpur-Bikaner	13	7	6,35	—81	—1,58	3,16	3,77	62	56	12
19	Morvi	10	40	7	5	—16	1	...	...	—1	—13
2 (g) to (m).	Rajputana-Malwa	5,14	2,85	3,32	3,98	3,53	8,20	13,88	9,48	8,62	13,99
20	Rohilkund and Kumaon	2,56	1,71	79	21	1,15	1,02	66	1,59	1,56	65
21	South Indian	1,01	76	1,52	3,59	3,03	3,83	1,46	3,40	6,64	8,41
22	Southern Mahratta	4,01	5,60	6,29	7,50	5,79	4,59	3,29	2,98	2,26	5,49
23	Udaipur-Chitor	...	...	...	...	...	19	4	1	...	1
24	Barsaet-Basirhat Light	...	...	...	...	...	..	...	...	...	...
25	Barsi Light	...	...	...	...	...	...	7	...	...	—4
26	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	39	1
27	Cutch	...	...	...	...	...	...	...	...	...	...
28	Dholpur-Bari	...	...	...	...	...	...	...	...	...	...
29	Dwara-Therria Light	...	...	...	...	...	...	...	...	...	...
30	Kalka-Simla	...	...	...	...	...	...	...	...	...	...
31	Ranaghat-Krishnagar Light	...	...	...	...	...	...	...	...	...	...
32	Tarakeshwar-Magra Light	...	...	1	1	...	2	5	6	3	5
33	Tezpore-Balipara Light	9	3	1	5	13	...	...	...	...	...
35	Darjeeling-Himalayan	42	38	49	25	10	21	12	31	4	16
36	Howrah-Amta Light	...	...	...	...	...	...	...	...	14	16
37	Howrah-Sheakhala Light	...	...	...	...	...	...	...	2	...	—1
38	Jorhat	10	...	...	4	...	17	3	...	...	...
	TOTAL	1,45,44	1,48,49	1,22,09	1,59,64	1,68,79	2,11,55	2,35,35	2,04,98	3,15,43	4,02,55

DIX 7—*concluded.*

during each of the past 10 years.

TOTAL CAPITAL EXPENDITURE IN THOUSANDS OF RUPEES *INCLUDING* VALUE OF STORES, ETC., NOT FINALLY CHARGED OFF IN THE ACCOUNTS.

YEAR.										REMARKS.
1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	
4,59	10,29	6,90	3,04	34	2,58	1,58	76	—36	...	
1,16,54	1,99,28	1,62,45	1,98,87	75,84	77,61	1,76,45	1,94,63	1,19,88	1,19,67	
54,14	58,06	89,09	98,82	28,58	56,65	29,50	19,61	9,62	7,90	
27,24	51,23	35,51	56,49	49,25	66,77	81,52	1,19,34	1,09,61	2,08,13	
70,12	1,42,83	1,66,97	2,18,13	1,62,49	1,41,12	1,45,82	1,39,68	1,45,03	2,33,23	
51,02	71,81	79,51	78,98	53,32	44,54	23,58	1,16,21	1,76,71	1,02,30	
27,45	19,63	12,65	19,27	55,11	63,58	60,36	86,09	72,11	69,17	
...	...	...	...	...	...	...	...	1,73	46,34	
1,85	18,30	60,32	96,90	32,24	18,40	15,84	5,73	5,26	6,53	
2,63,14	1,66,19	82,47	66,46	83,47	93,87	1,30,10	69,58	2,09,09	2,72,27	
50,23	44,90	33,16	55,69	39,26	32,76	76,47	87,45	53,06	41,37	
1,17,01	1,16,28	1,18,74	1,13,15	86,46	83,47	69,86	53,24	19,81	18,24	
35,46	1,68,40	79,06	70,13	55,94	48,78	63,47	53,92	79,28	90,04	
1,07	2,17	4,25	22,26	19,77	15,23	10,45	7,09	5,85	3,56	
14,18	8,67	8,95	92	17	96	44	67	—1,40	—34	
82,48	59,87	51,62	86,24	92,79	95,26	71,01	31,03	36,97	84,20	
...	...	1	—1	...	...	—9	...	...	23	
53	2,55	27	17	2,57	8,82	1,73	41	4,69	46	
48	10,12	39,36	18,04	4,29	19,78	6,64	—57	2,21	1,60	
—17	94	8	27	2,22	31	—26	56	6,18	9,85	
11,46	—2,83	9,43	10,59	17,19	12,74	22,33	30,53	43,74	39,23	
2,61	3,79	2,10	13	5,37	4,34	12,92	4,60	19,79	50,64	
—14	4,59	—19,33	7,39	17,47	47,49	99,17	52,83	31,08	23,65	
59	8,19	11,05	8,74	8,15	4,83	1,22	24,96	34,22	33,49	
18	2,51	1,18	2,16	45	82	4	1	...	1	
...	...	...	...	...	...	...	...	7,73	1,33	
2,49	1,77	27	...	...	—39	19	...	26	14,62	
...	...	...	...	...	...	...	7,48	62	1	
...	...	...	...	...	...	...	1,04	1,48	10	
...	...	...	...	...	...	...	...	...	2,04	
...	...	...	...	...	...	...	8,24	1,39	16	
...	...	...	5,81	6,10	22,96	57,95	48,51	26,93	7,87	
...	1,01	6,21	5	24	...	...	...	...	...	
...	...	2	24	—1	10	20	38	10	2	
27	3	7	17	13	...	...	...	...	...	
65	41	24	79	—6	22	20	72	74	14	
4,70	5,27	1,28	16	47	8	72	20	3,23	16	
1,31	3,98	81	...	...	...	...	5	...	—1	
37	37	7	22	—23	—8	—5	8	...	4	
9,17,85	11,80,61	10,44,17	12,40,27	8,99,98	9,65,10	11,59,36	11,65,11	12,26,14	14,88,37	

APPEN

Capital outlay on the different classes of

	Mileage.		
	Open.	Under construction.	Total.
PART I.			
Capital expenditure on railways, the transactions of which pass through the Government Accounts.	Miles.	Miles.	Miles.
(*i*).—State lines worked by Companies	14,777·00	1,189·50	15,966·50
(*ii*).—State lines worked by the State	5,916·89	385·11	6,302·00
(*iii*).—Companies' lines guaranteed under the old contracts	1,408·36	...	1,408·36
(*iv*).—Companies' lines guaranteed under modern contracts	32·04	...	32·04
(*v*).—District Boards' lines	99·46	...	99·46
(*vi*).—Branch Line Companies, receiving rebates from traffic interchanged with main lines.	373·13	...	373·13
Total open lines and lines partly open ...	22,606·88	1,574·61	24,181·49
(*vii*).—Lines wholly under construction by State agency	...	498·83	498·83
(*viii*).—Lines wholly under construction by Companies	...	331·84	331·84
Total (*vii*) and (*viii*) ...	...	830·67	830·67
(*ix*).—Unclassified expenditure including collieries, &c.	...	...	...
Total Part I ...	22,606·88	2,405·28	25,012·16
PART II.			
Capital expenditure on railways, the transactions of which do not pass through the Government Accounts.			
(*i*).—Branch Line Companies, receiving rebates from traffic interchanged with main lines.	537·28	77·45	614·73
(*ii*).—Assisted Companies' lines—			
(*a*) Subsidized by the Government of India	162·36	...	162·36
(*b*) Subsidized by Local Governments	136·26	8·50	144·76
(*c*) Subsidized by District Boards	158·00	...	158·00
(*d*) Receiving land only from Government	1,171·77	168·80	1,340·57
Total (*ii*) ...	1,628·39	177·30	1,805·69
(*iii*).—Unassisted Companies' lines	41·77	...	41·77
(*iv*).—Native State lines—			
(*a*) Worked by Native States	1,333·49	28·13	1,361·62
(*b*) Worked by Companies	1,838·76	146·83	1,985·59
(*c*) Worked by State railway agency	235·29	...	235·29
Total (*iv*) ...	3,407·54	174·96	3,582·50
(*v*).—Foreign State lines	73·60	...	73·60
Total open lines and lines partly open ...	5,688·58	429·71	6,118·29
(*vi*).—Lines wholly under construction by private Companies	...	36·29	36·29
(*vii*).—Lines wholly under construction by Native States	...	19·25	19·25
Total (*vi*) and (*vii*) ...	...	55·54	55·54
(*viii*).—State outlay on the Patri branch (Bombay, Baroda and Central India railway)...	...	...	...
Total Part II ...	5,688·58	485·25	6,173·83
GRAND TOTAL ...	28,295·46	2,890·53	31,185·99
ABSTRACT.			
Outlay on open lines and lines partly open—(*i* to *vi*, Part I, and *i* to *v*, Part II) ...	28,295·46	2,004·32	30,299·78
Outlay on lines wholly under construction—(*vii* and *viii*, Part I, and *vi* and *vii*, Part II)	...	886·21	886·21
Unclassified expenditure (*ix*, Part I)	...	...	...

DIX 8.

railways at the close of the year 1905.

Capital outlay at close of 1905. (In thousands of rupees.)			Remarks.
Open lines.	Lines under construction.	Total.	
2,01,99,26	4,81,44	2,06,80,70	The outlay included in Part I under "State lines worked by Companies" on account of the railways purchased by the State from the East Indian, the South Indian, and the Great Indian Peninsula Railway Companies, and under "State lines worked by the State" on account of the railways purchased from the Eastern Bengal, the Sind, Punjab and Delhi and the Oudh and Rohilkhand Guaranteed Railway Companies, represents the actual Capital expenditure incurred by the Companies up to the date of purchase and subsequently by the State.
89,60,53	2,56,93	92,17,46	
26,37,50	...	26,37,50	
29,21	...	29,21	
47,33	...	47,33	
3,04,84	...	3,04,84	
3,21,78,67	7,38,37	3,29,17,04	
...	76,88	76,88	
...	1,74,90	1,74,90	
...	2,51,78	2,51,78	
...	...	95,17	
3,21,78,67	9,90,15	3,32,63,99	
2,88,22	33,37	3,21,59	
1,56,07	...	1,56,07	
1,24,83	...	1,24,83	
71,53	...	71,53	
9,46,61	53,29	9,99,90	
12,99,04	53,29	13,52,33	
27,26	...	27,35	
4,68,21	1	4,68,22	
12,95,14	20,63	13,15,77	
1,32,87	...	1,32,87	
18,96,22	20,64	19,16,86	
1,50,79	...	1,50,79	
36,61,52	1,07,30	37,68,82	
...	13,40	13,40	
...	2,04	2,04	
...	15,44	15,44	
...	...	8,08	
36,61,52	1,23,74	37,92,34	
3,58,40,19	11,12,89	3,70,56,33	
3,58,40,19	8,45,67	*3,66,93,94	* Includes Rs. 8,08,000, item (viii) of Part II.
...	2,67,22	2,67,22	
...	...	95,17	

APPEN

Capital liability on account of Railways classed

Railways.	(1) Share Capital of purchased Railways being paid off by Annuities.						(2)	(3)	(4)	(5)	(6)
		Deduct.									
	Commuted value of stock purchased.	Commuted Capital representing Annuities which were purchased by creation of debt (liability included in column 3).	New Stock of Great Indian Peninsula Railway Company issued in exchange for portion of Annuity.	Net capital to be paid off by Annuities.	*Deduct* amount redeemed by Annuity payments.	Net outstanding.	State outlay.	Debt incurred for purchase of Railways.	Capital advanced by Government to Companies.	Capital raised by Companies on Secretary of State's Guarantee (including over drafts).	Total Capital liability.
India, General.	£	£	£	£	£	£	£	£	£	£	£
1. East Indian	32,750,000	7,299,157	...	25,450,843	2,365,126	23,085,717	7,093,949	7,719,552	...	8,000,300	45,899,518
2. Rajputana-Malwa (incldg. Godhra-Rutlam-Nagda).	...	...	...	...	...	...	10,539,462	...	...	...	10,539,462
3. Rewari-Phulera	...	...	...	...	...	...	317,173	...	...	...	317,173
4. Palanpur-Deesa	...	...	...	...	...	...	15,805	...	...	...	15,805
5. Bhopal	...	...	...	...	...	...	211,796	...	...	...	211,796
6. State railway stores	...	...	...	...	...	...	2,074	...	...	...	2,074
7. Expenditure in England for stores purchased and remaining unappropriated.	...	...	...	...	...	...	88,172	...	...	...	88,172
Central Provinces.											
8. Warora Colliery	...	...	...	...	...	...	88,327	...	...	...	88,327
9. Umaria ,, (depreciation on works).	...	...	...	...	...	...	12,178	...	...	...	12,178
10. Bilaspur-Etawah	...	...	...	...	...	...	5,009	...	...	...	5,009
11. Nagpur-Chhattisgarh (depreciation account).	...	...	...	...	...	...	43,802	...	...	...	43,802
Burma.											
12. Pegu-Moulmein	...	...	...	...	...	...	341,467	...	...	...	341,467
13. Henzada-Kyangin	...	...	...	...	...	...	102,432	...	...	...	102,432
Assam.											
14. Jorhat	...	...	...	...	...	...	60,563	...	...	...	60,563
Bengal.											
15. Eastern Bengal system	3,391,917	543,817	...	2,848,100	233,468	2,614,632	9,524,382	869,040	...	...	13,008,054
16. Murshidabad Branch	...	...	...	...	...	...	561,845	...	...	...	561,845
17. Dhubri-Ganhati	...	...	...	...	...	...	302,708	...	...	...	302,708
18. Tirhoot	...	...	...	...	...	...	3,594,888	...	...	...	3,594,888
19. Tirhoot new Extensions	...	...	...	...	...	...	547,576	...	...	...	547,576
20. Ranaghat-Bhagwangola	...	...	...	...	...	...	20,163	...	...	...	20,163
21. Katihar-Godagari	...	...	...	...	...	...	170,670	...	...	...	170,670
United Provinces.											
22. Oudh and Rohilkhand	...	...	...	...	...	...	3,939,193	10,731,640	...	...	14,670,833
23. Agra-Delhi Chord	...	...	...	...	...	...	816,462	...	...	...	816,462
24. Allahabad-Jaunpur	...	...	...	...	...	...	138,675	...	...	...	138,675
Punjab.											
25. North Western	14,009,124	4,911,216	...	9,097,908	692,457	8,405,451	29,317,241	4,190,926	...	...	41,913,618
26. Shadera-Sangla	...	...	...	...	...	...	77,195	...	...	...	77,195
27. Jech Doab (southern sec.)	...	...	...	...	...	...	432,330	...	...	...	432,330
28. Quetta-Nushki	...	...	...	...	...	...	559,533	...	...	...	559,533
29. Peshawar Railway Reserve	...	...	...	...	...	...	19,243	...	...	...	19,243
30. Frontier Railway Reserve	...	...	...	...	...	...	293,212	...	...	...	293,212
31. Petroleum Operations, Baluchistan.	...	...	...	...	...	...	7,946	...	...	...	7,946
32. Jullundur-Hoshiarpur	...	...	...	...	...	...	969	...	...	...	969
33. Ludhiana-Ferozepore	...	...	...	...	...	...	1,887	...	...	...	1,887
34. Loi Shilman	...	...	...	...	...	...	3,545	...	...	...	3,545
Carried over...	50,151,041	12,754,190	...	37,396,851	3,291,051	34,105,800	69,251,872	23,511,158	...	8,000,300	134,869,130

DIX 9.

as State railways at end of 1905.

Railways.	(1) Share Capital of Purchased Railways being paid off by Annuities.						(2)	(3)	(4)	(5)	(6)
	Commuted value of stock purchased.	Deduct. Commuted capital representing annuities which were purchased by creation of debt (liability included in column 3).	Deduct. New stock of Great Indian Peninsula Railway Company issued in exchange for portion of annuity.	Net capital to be paid off by annuities.	*Deduct* amount redeemed by annuity payments.	Net outstanding.	State outlay.	Debt incurred for purchase of Railways.	Capital advanced by Government to Companies.	Capital raised by Companies on Secretary of State's guarantee (including overdrafts).	Total capital liability.
	£	£	£	£	£	£	£	£	£	£	£
Brought forward ...	50,151,041	12,754,190	...	37,396,851	3,291,051	34,105,800	69,251,872	23,511,158	...	8,000,300	134,869,130
Madras.											
35. South Indian (including Pamban Branch).	...	...	...	...	...	...	1,955,959	4,726,168	...	1,425,000	8,107,127
36. Tinnevelly-Quilon (British section).	...	...	...	...	...	...	24,813	...	...	263,654	288,467
37. Tinnevelly-Quilon (Native State section).	...	...	...	...	...	...	72,524	...	...	711,346	783,870
38. Azhikal-Mangalore . .	...	...	...	...	...	...	652,067	...	...	...	652,067
39. North-East line, Madras railway (East Coast Railway, southern section).	...	...	...	...	...	...	4,335,576	...	...	...	4,335,576
40. Nilgiri	...	...	...	...	...	...	245,976	...	...	...	245,976
41. Bezwada extension . .	...	...	...	...	...	...	78,576	...	...	...	78,576
42. Guntakal-Mysore frontier .	...	...	...	...	...	...	394,799	...	...	...	394,799
43. Tanjore District Board .	...	...	...	...	...	...	194,139	...	79,321	41,047	314,507
44. Vizagapatam-Raipur . .	...	...	...	...	...	...	16,336	...	...	...	16,336
45. Hospet-Kottur* . . .	...	...	...	...	...	...	92,109	...	...	...	92,109
46. Bellary-Rayadrug . .	...	...	...	...	...	...	51,345	...	...	...	51,345
47. Tirupattur-Krishnagiri .	...	...	...	...	...	...	70,913	...	...	...	70,913
48. Morappur-Dharmapuri .	...	...	...	...	...	...	50,816	...	...	...	50,816
49. Coonoor-Ootacamund . .	...	...	...	...	...	...	46,459	...	...	...	46,459
50. Rameswaram Extension .	...	...	...	...	...	...	24,443	...	...	...	24,443
Bombay.											
51. Great Indian Peninsula .	34,859,218	...	1,750,000	33,109,218	1,919,891	31,189,327	2,743,258	5,964,666	850,000	2,575,000	43,322,251
52. Jodhpur-Hyderabad (British section).	...	...	...	...	...	...	264,530	...	...	...	264,530
53. Southern Mahratta (depreciation on works).	...	...	...	...	...	...	35,138	...	...	...	35,138
54. Sabarmati-Dholka . .	...	...	...	...	...	...	3,993	...	...	...	3,993
55. Nagda-Muttra . . .	...	...	...	...	...	...	320,463	...	...	...	320,463
	85,010,259	12,754,190	1,750,000	70,506,069	5,210,942	65,295,127	80,926,104	34,201,992	929,321	13,016,347	193,463,891
Leased Lines.											
56. Assam-Bengal . . .	...	...	...	...	...	...	5,028,495	...	...	2,855,900	7,884,395
57. Bengal-Nagpur . . .	...	...	...	...	...	...	2,061,962	...	8,530,580	8,505,000	19,097,542
58. Burma	...	...	...	...	...	...	5,127,488	...	...	3,717,474	8,844,962
59. Indian Midland . . .	...	...	...	...	...	...	...	...	1,988,378	6,00,11,516	7,969,894
60. Lucknow-Bareilly . .	...	...	...	...	...	...	341,409	...	309,635	147,000	798,044
61. Mysore	...	...	...	...	...	...	...	...	...	1,200,000	1,200,000
62. Southern Mahratta . .	...	...	...	...	...	...	1,105,228	...	2,129,900	4,822,381	8,057,509
	...	...	...	...	...	...	13,664,582	...	12,958,493	27,249,271	53,872,346
Branch Lines.											
63. Hardwar-Dehra . . .	...	...	...	...	...	...	...	...	...	194,710	194,710
	...	...	...	...	...	...	...	...	...	194,710	194,710
Total .	85,010,259	12,754,190	1,750,000	70,506,069	5,210,942	65,295,127	94,590,686	34,201,992	13,887,814	40,460,328	248,435,947

Note.—The premia paid in purchase of companies' lines are as under:—

	£		Rs.
East Indian Railway	6,550,000	@ Rs. 15 = £ 1 =	9,82,50,000
Eastern Bengal Railway	1,136,437	" =	1,70,46,555
Sindh-Punjab and Delhi railway	2,938,804	" =	4,40,07,060
South Indian Railway	989,277	" =	1,48,39,155
Oudh and Rohilkhand Railway	1,036,049	" =	1,55,40,735
Great Indian Peninsula Railway	14,859,218	" =	22,28,88,270

APPEN

Main results of working Indian railways

Year.	Mileage open.	In thousands of rupees.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on Capital outlay on lines wholly and partly open.	Passengers.			Goods.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1853 .	20	37,96	90	41	49	87	45·56	1·29	...	...	...	...	...	...
1854 .	71	4,00,00	2,31	1,42	89	63	61·47	0·22	...	...	...	...	...	...
1855 .	169	5,50,00	3,13	4,55	3,58	93	55·97	0·65	...	...	...	...	...	...
1856 .	272	8,00,00	16,10	6,74	9,36	114	41·87	1·17	...	...	...	...	...	...
1857 .	287	12,00,00	25,43	10,54	14,89	170	41·45	1·24	...	...	...	...	...	...
1858 .	427	16,00,00	33,82	15,63	18,19	152	46·22	1·14	...	...	...	...	...	...
1859 .	625	22,50,00	57,24	27,74	29,50	176	48·46	1·31	...	...	...	...	...	...
1860 .	888	26,66,00	66,67	37,08	29,59	153	55·61	1·11	...	...	...	...	...	...
1861 .	1,587	34,00,00	98,63	58,09	40,54	120	58·90	1·19	...	...	...	...	...	...
1862 .	2,333	48,00,00	1,34,45	80,32	54,13	111	59·74	1·13	...	...	...	...	...	...
1863 .	2,507	55,00,00	2,20,47	1,33,04	87,43	169	60·34	1·65	...	...	...	...	...	...
1864 .	2,958	58,00,00	2,85,89	1,70,85	1,15,04	186	59·76	1·98	...	...	...	...	...	...
1865 .	3,963	63,00,00	4,25,84	2,24,27	2,01,57	244	52·43	3·20	...	...	...	...	...	...
1866 .	3,563	70,00,00	4,91,91	2,59,38	2,32,53	266	52·73	3·32	...	...	...	...	...	...
1867 .	3,929	80,00,00	5,44,54	2,93,76	2,50,78	266	53·95	3·13	...	...	...	...	...	...
1868 .	4,008	84,00,00	5,67,09	3,07,46	2,59,63	272	54·22	3·09	...	...	...	...	...	...
1869 .	4,255	89,00,00	6,13,10	3,41,74	2,71,36	277	55·74	3·05	...	...	...	...	...	...
1870 .	4,771	90,00,50	6,56,67	3,53,15	3,03,52	269	54·47	3·37	...	...	...	...	...	
1871 .	5,074	90,00,70	6,59,20	3,67,97	2,91,23	250	55·82	3·24	...	...	...	...	...	...
1872 .	5,369	90,00,90	6,82,96	3,73,45	3,09,51	245	54·68	3·44	...	...	...	...	...	...
1873 .	5,637	91,72,60	7,22,90	3,77,35	3,45,05	244	52·28	3·76	...	...	...	...	...	...
1874 .	6,226	95,87,15	8,33,77	4,03,89	4,29,88	258	48·44	4·48	...	...	...	...	...	...
1875 .	6,541	1,00,96,28	7,91,37	3,97,48	3,93,89	233	50·23	3·90	...	...	...	...	...	...
1876 .	6,860	1,04,77,85	9,33,83	4,46,45	4,87,38	262	47·81	4·65	...	...	...	...	...	...
1877 .	7,320	1,09,04,24	12,11,28	5,38,68	6,72,60	318	44·47	6·17	...	...	...	...	...	...
1878 .	8,201	1,18,29,55	11,25,30	5,62,38	5,62,92	269	49·97	4·76	...	...	...	...	...	...

DIX 10.

as one system from the commencement.

Year.	Mileage open.	In thousands of rupees.				Gross earnings per mile per week.	Percentage of working expenses to gross earnings.	Percentage of net earnings on capital outlay on lines wholly and partly open.	Passengers.			Goods.		
		Capital outlay.	Gross earnings.	Working expenses.	Net earnings.				Number carried in thousands	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
						Rs.								
1879 .	8,475	1,22,72,97	12,06,15	6,26,28	5,81,87	275	51·64	4·70	...	...	...	...	...	...
1880 .	8,996	1,23,56,91	12,86,55	6,42,00	6,28,55	282	50·37	4·97	...	...	...	...	...	...
1881 .	9,858	1,40,80,20	14,33,31	7,07,12	7,25,19	285	49·37	5·16	54,764	3,79,23	2·78	13,214	9,55,97	7·95
1882 .	10,069	1,43,24,42	15,35,23	7,66,81	7,68,42	294	49·95	5·36	58,876	4,08,37	2·71	14,833	10,15,97	7·91
1883 .	10,447	1,48,30,56	16,38,94	7,97,05	8,41,89	301	48·62	5·68	65,099	4,09,08	2·60	16,999	11,28,89	7·30
1884 .	11,527	1,55,45,04	16,06,62	8,15,62	7,91,00	276	50·76	5·09	73,815	4,46,84	2·56	16,663	10,56,59	7·35
1885 .	12,208	1,61,91,78	17,28,96	8,86,33	9,12,63	284	49·27	5·64	80,865	4,78,12	2·52	18,925	11,91,54	6·89
1886 .	12,865	1,70,49,89	18,70,46	8,93,10	9,77,36	285	47·75	5·73	88,436	5,09,77	2·51	19,576	12,38,59	7·02
1887 .	14,068	1,82,87,93	18,46,81	9,10,33	9,36,48	260	49·31	5·12	95,412	5,35,32	2·51	20,196	11,92,93	7·17
1888 .	14,525	1,93,04,33	19,76,45	9,87,44	9,89,01	263	49·96	5·12	103,156	5,69,06	2·71	22,393	12,79,04	6·87
1889 .	15,900	2,05,04,61	20,48,37	10,37,74	10,11,63	257	50·64	4·93	110,650	6,13,74	2·52	22,249	13,05,56	6·88
1890 .	16,404	2,18,67,04	20,67,01	10,30,89	10,36,12	243	49·87	4·85	114,062	6,25,81	2·51	22,613	12,99,52	7·11
1891 .	17,283	2,21,06,42	24,04,13	11,30,39	12,73,64	271	47·02	5·76	122,855	6,86,13	2·52	26,159	15,60,81	6·75
1892 .	17,769	2,27,50,00	23,22,93	10,90,35	12,32,58	253	46·94	5·42	127,888	6,91,15	2·52	26,335	14,77,52	6·70
1893 .	18,459	2,33,17,87	24,08,42	11,34,77	12,73,65	254	47·12	5·46	135,520	7,29,57	2·50	28,847	15,21,63	6·60
1894 .	18,840	2,37,79,01	25,50,89	11,98,40	13,52,49	262	46·98	5·69	145,727	7,57,58	2·56	32,644	16,24,83	6·42
1895 .	19,467	2,44,38,05	26,23,69	12,11,99	14,11,70	261	46·19	5·78	153,081	8,02,21	2·49	33,628	16,36,94	6·36
1896 .	20,209	2,58,95,23	25,36,14	12,13,84	13,22,30	245	47·86	4·92	159,509	8,22,07	2·45	32,471	15,41,51	6·45
1897 .	21,115	2,82,13,04	25,60,11	12,47,73	13,12,38	233	48·74	4·65	150,584	7,62,13	2·47	33,926	15,88,69	6·36
1898 .	22,024	2,92,09,20	27,41,31	12,98,68	14,42,63	244	47·37	4·94	151,566	7,58,68	2·50	35,642	17,84,97	6·00
1899 .	23,507	3,08,50,12	29,36,78	13,93,36	15,43,42	246	47·45	5·00	161,720	8,09,39	2·51	39,748	19,19,82	5·98
1900 .	*Revised* 24,752	3,29,53,34	31,54,32	15,09,31	16,45,01	245	47·85	4·99	176,208	8,95,07	2·11	42,896	20,36,52	5·88
1901 .	25,863	3,39,16,89	33,60,38	15,72,45	17,87,93	255	46·79	5·27	194,749	10,07,17	2·48	48,392	21,23,57	5·77
1902 .	25,931	3,49,77,84	33,92,69	16,70,49	17,22,20	252	49·24	4·92	196,648	10,27,48	2·51	45,537	21,23,41	5·68
1903 .	26,956	*Revised.* 3,41,11,23	36,00,82	17,11,09	18,89,73	257	47·52	5·54	210,231	10,98,14	2·51	47,684	22,41,92	5·64
1904 .	27,565	3,52,85,95	39,64,97	18,77,50	20,87,47	277	47·36	5·91	227,097	11,76,20	2·51	52,051	25,18,81	5·39
1905 .	28,295	3,66,93,94	41,68,09	19,94,00	21,74,09	283	47·84	5·92	248,157	12,73,83	2·47	54,936	26,20,71	5·12

APPEN

Summary of the general Indian Railways

GENERAL RESULTS

Calendar year.	Total Capital outlay in thousands of rupees.	Gross earnings in thousands of rupees.	Total working expenses.	
			Amount in thousands of rupees.	Proportion per cent. to gross earnings.
1	2	3	4	5
1901	3,39,16,89	33,60,38	15,72,45	46·79
1902	3,49,77,34	33,92,69	16,70,49	49·24
1903	3,41,11,23	36,00,82	17,11,09	47·52
1904	3,52,85,95	39,64,97	18,77,50	47·35
1905	3,66,93,94	41,68,09	19,94,00	47·84

GROSS EARNINGS IN THOUSANDS

Calendar year.	Coaching traffic.							Goods		
	1st class.	2nd class.	Intermediate class.	3rd class.	Season and vendors' tickets.	Other Coaching Traffic.	Total Coaching Traffic (sum of 15 to 20).	Total Goods Traffic (sum of 23 to 27).	General merchandise.	Coal and coke for the public and foreign railways.
14	15	16	17	18	19	20	21	22	23	24
1901	32,78	52,43	64,39	8,48,25	9,32	1,34,71	11,41,88	21,23,67	17,53,14	2,35,01
1902	38,57	56,59	67,60	8,54,97	9,75	1,47,60	11,75,08	21,23,41	17,40,72	2,26,75
1903	41,56	58,13	71,68	9,16,81	10,46	1,56,26	12,54,40	22,41,92	18,53,45	2,29,93
1904	40,76	59,78	74,84	9,39,63	11,19	1,61,36	13,37,56	25,18,81	20,85,56	2,56,13
1905	45,12	64,66	83,06	10,63,76	12,23	1,64,69	14,33,52	26,20,71	21,32,22	2,89,19

Number of passengers and quantity of goods carried, the average miles

PASSENGERS CARRIED IN THOUSANDS, THE AVERAGE MILES CARRIED AND

Calendar year.	1st Class.			2nd Class.			Intermediate Class.			3rd Class.		
	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Average rate charged per mile in pies.
36	37	38	39	40	41	42	43	44	45	46	47	48
1901	532	92·62	12·75	2,405	76·27	5·49	6,670	59·94	3·09	170,416	41·27	2·31
1902	563	102·28	12·86	2,530	82·39	5·21	6,813	61·30	3·11	171,716	41·06	2·33
1903	594	101·71	13·21	2,580	78·13	5·54	7,214	61·64	3·09	184,292	40·94	2·33
1904	608	95·98	13·41	2,715	74·23	5·69	7,394	62·89	3·09	199,651	40·71	2·34
1905	662	98·29	13·31	2,949	72·92	5·77	8,104	63·78	3·09	218,413	40·92	2·30

DIX 11.

results of working
treated as one system.

OF WORKING.

NET EARNINGS.		PER MILE OPEN.			PER TRAIN-MILE.			REMARKS.
Amount in thousands of rupees.	Percentage on Capital outlay.	Gross earnings.	Working expenses.	Net earnings.	Gross earnings.	Working expenses.	Net earnings.	
6	7	8	9	10	11	12	13	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
17,87,93	5·27	13,249	6,200	7,049	3·81	1·78	2·03	
17,22,20	4·92	13,084	6,442	6,642	3·67	1·81	1·86	
18,89,73	5·54	13,358	6,348	7,010	3·75	1·78	1·97	The decrease in the capital outlay for 1903 is due to the revision of the capital outlay hitherto adopted for lines purchased by the State from Guaranteed Railway companies.
20,87,47	5·91	14,384	6,811	7,573	3·86	1·83	2·03	
21,74,09	5·92	14,731	7,047	7,684	3·89	1·86	2·03	

OF RUPEES.

TRAFFIC.					WORKING EXPENSES IN THOUSANDS OF RUPEES.						
Military stores.	Revenue stores, including coal and material for construction.	Miscellaneous.	Electric telegraph.	Steamboat and sundries.	Engineering.	Locomotive.	Carriage and wagon.	Traffic.	General.	Other expenses (steamboat, contribution to Provident Fund and special and miscellaneous expenditure).	
25	26	27	28	29	30	31	32	33	34	35	
14,97	96,41	24,14	7,49	87,34	3,55,93	5,59,13	1,51,90	2,63,92	1,57,85	83,72	The totals of columns 23 to 27 are more than the figures shown in column 22 by the amount of the Cawnpore-Burhwal link earnings.
21,67	1,14,93	25,08	7,32	86,88	3,89,67	5,78,85	1,76,38	2,73,70	1,63,70	88,19	
23,07	1,13,90	27,31	7,84	96,66	3,88,99	6,11,95	1,52,51	2,92,19	1,68,91	96,54	
19,14	1,31,04	32,27	8,00	1,00,60	4,37,28	6,72,07	1,76,74	3,10,25	1,75,67	1,05,49	
20,63	1,46,51	33,77	8,79	1,00,11	4,81,59	7,02,38	1,84,05	3,31,02	1,86,93	1,08,03	

carried and the average rate charged, and the train-mileage run by railways in India.

THE AVERAGE RATE CHARGED.					TRAIN-MILES RUN (IN THOUSANDS).				GOODS TRAFFIC.		
SEASON AND VENDORS' TICKETS.			TOTAL NO. OF PASSENGERS CARRIED.								
No.	Average miles carried.	Average rate charged per mile in pies.	No.	Average miles carried.	Coaching.	Goods.	Mixed.	Total train-mileage (includes miscellaneous train-mileage).	Tons carried (in thousands).	Average miles carried.	Average rate charged per mile in pies.
49	50	51	52	53	54	55	56	57	58	59	60
14,726	8·63	1·41	194,749	40·42	19,701	34,274	31,561	88,265	43,392	162·75	5·77
15,026	8·85	1·41	196,648	40·03	21,708	36,019	31,781	92,527	45,537	157·54	5·68
15,551	8·75	1·48	210,231	39·90	25,889	36,308	31,488	95,960	47,684	159·93	5·64
16,729	9·08	1·41	227,097	39·66	31,577	38,797	28,620	102,721	52,051	172·42	5·39
18,029	9·16	1·42	248,157	39·90	33,491	39,712	29,892	107,045	54,936	176·60	5·19

APPENDIX 12.

General results of working each railway system.

Number. Main head.	Number. Sub-head.	Railway.	Year.	Number of passengers carried (in thousands).	Quantity of goods and minerals carried (in thousands of tons).	Gross earnings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	Remarks.
		5' 6" GAUGE.								
...	...	Bengal Central ...	1901	1,885	178	14,05	7,62	6,43	54·25	‡ Figures shown are only for the first-half of the year. Those for the second-half have been included with Eastern Bengal State railway, broad gauge.
			1902	1,911	159	13,17	7,43	5,74	56·43	
			1903	1,989	206	15,09	10,01	5,08	66·36	
			1904	2,041	235	15,60	10,20	5,40	65·40	
			1905	‡1,070	‡76	‡6,66	‡5,08	‡1,58	‡76·28	
1	(a), (b) and (e)	Bengal-Nagpur ...	1901	6,108	2,212	1,30,78	69,29	61,49	52·98	
			1902	6,472	2,880	1,42,18	72,80	69,38	51·20	
			1903	6,409	2,918	1,55,48	85,02	70,46	54·69	
			1904	7,745	3,381	1,89,12	93,25	95,87	49·31	
			1905	8,902	3,975	2,44,71	1,10,68	1,34,03	45·23	
2	(a), (c) to (f), (n) and (o)	Bombay, Baroda and Central India.	1901	18,144	1,973	1,70,58	75,91	94,67	44·50	
			1902	18,894	1,927	1,71,20	83,83	87,37	48·96	
			1903	19,654	1,770	1,83,76	91,73	92,03	49·92	
			1904	21,685	1,797	1,91,08	90,19	1,00,89	47·20	
			1905	23,489	2,055	2,11,73	92,47	1,19,26	43·67	
3	(a)	Eastern Bengal State ...	1901	13,272	1,616	94,44	48,07	46,37	50·89	
			1902	13,654	1,800	1,03,83	50,03	53,80	48·18	
			1903	14,331	2,654	1,02,22	51,39	50,83	50·27	
			1904	14,680	2,690	1,08,77	57,80	50,97	53·14	
			1905	17,090	2,975	1,18,00	64,44	53,56	54·61	
4	(a) to (d)	East Indian	1901	23,875	10,418	7,30,48	2,57,61	4,72,87	35·27	
			1902	23,256	10,484	7,04,34	2,58,80	4,45,54	36·74	
			1903	24,282	10,702	7,26,62	2,46,23	4,80,39	33·89	
			1904	25,181	12,241	7,87,26	2,66,82	5,20,44	33·89	
			1905	25,938	12,236	7,79,46	2,52,15	4,97,31	36·20	
5	(a)	Great Indian Peninsula ...	1901	20,109	3,213	4,18,15	2,00,85	2,17,30	48·03	
			1902	18,349	3,278	4,24,25	2,12,87	2,11,38	50·17	
			1903	20,221	4,518	4,68,69	2,30,49	2,38,20	49·18	
			1904	22,454	5,092	5,86,20	2,92,83	2,93,37	49·96	
			1905	25,293	5,676	6,30,44	3,05,37	3,25,07	48·44	
5	(b) to (g)	Indian Midland ...	1901	2,529	1,309	1,00,02	48,98	51,04	48·97	* Included with the Great Indian Peninsula railway.
			1902	2,549	1,349	1,09,63	55,67	53,96	50·78	
			1903	*	*	1,00,33	49,68	50,65	49·52	
			1904	*	*	*	*	*	*	
			1905	*	*	*	*	*	*	
6	(a) to (c)	Madras	1901	12,277	2,413	1,62,73	83,64	79,09	51·40	
			1902	13,005	2,319	1,66,04	91,09	74,95	54·86	
			1903	13,712	2,340	1,73,47	1,01,50	71,97	58·51	
			1904	13,953	2,743	1,90,53	1,11,29	79,24	58·41	
			1905	14,396	2,822	2,08,41	1,22,39	86,02	58·73	
8	(a) & (b)	Nizam's Guaranteed State ...	1901	1,409	920	43,55	15,50	28,05	35·59	
			1902	1,750	935	46,96	18,73	28,23	39·89	
			1903	1,797	895	46,26	19,33	26,93	41·79	
			1904	1,476	878	46,53	16,83	29,70	36·17	
			1905	1,583	857	46,26	15,72	30,54	33·98	
9	(a) to (i)	North Western State—								† Information not available.
		Commercial Section ...	1901	†	†	4,14,73	1,91,35	2,23,38	46·14	
			1902	†	†	4,17,94	2,23,99	1,93,95	53·59	
			1903	†	†	4,89,77	2,20,61	2,69,16	45·04	
			1904	†	†	6,12,74	2,63,32	3,49,42	42·97	
			1905	†	†	5,99,17	2,81,14	3,18,03	46·92	
		Military Section ...	1901	†	†	38,17	38,61	−44	101·15	
			1902	†	†	37,09	41,97	−4,88	113·16	
			1903	†	†	38,99	41,71	−2,72	106·98	
			1904	†	†	46,00	52,19	−6,19	113·47	
			1905	†	†	43,07	43,97	−90	102·09	
		Total ...	1901	20,294	5,604	4,52,90	2,29,96	2,22,94	50·77	
			1902	20,822	5,934	4,55,03	2,65,96	1,89,07	58·44	
			1903	22,777	6,064	5,28,76	2,62,32	2,66,44	49·61	
			1904	25,524	6,431	6,58,74	3,15,51	3,43,23	47·89	
			1905	30,017	7,237	6,42,24	3,25,11	3,17,13	50·62	
10	(a) to (e)	Oudh and Rohilkhand State ...	1901	8,764	1,899	1,34,68	61,42	73,26	45·60	
			1902	8,332	2,302	1,34,18	68,81	65,37	51·28	
			1903	8,902	2,359	1,42,13	68,49	73,64	48·19	
			1904	9,776	2,541	1,55,60	82,95	72,65	53·31	
			1905	10,797	2,340	1,56,99	92,21	64,78	58·74	
		3' 3¾" GAUGE.								
11	(a) & (b)	Assam-Bengal ...	1901	1,740	239	21,34	16,78	4,56	78·60	
			1902	1,763	326	20,96	18,42	2,54	87·86	
			1903	1,961	403	24,28	19,58	4,70	80·64	
			1904	2,220	361	30,10	28,57	1,53	94·92	
			1905	2,476	432	34,33	33,00	1,33	94·75	

APPENDIX 12—*contd.*

General results of working each railway system—contd.

Number. Main head.	Number. Sub-head.	Railway.	Year.	Number of passengers carried (in thousands).	Quantity of goods and minerals carried (in thousands of tons).	Gross earnings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	Remarks.
		3′ 3¾″ GAUGE—*contd.*								
12	(*a*) & (*b*)	Bengal and North-Western ...	1901	9,802	1,370	97,21	43,34	53,87	44·59	
			1902	10,126	1,460	1,01,50	47,04	54,46	46 35	
			1903	12,077	1,707	1,19,15	48,50	70,65	40·71	
			1904	12,910	1,789	1,29,99	51,60	78,39	39·70	
			1905	14,006	1,815	1,28,61	53,31	70,30	43·13	
13	(*a*) & (*b*)	Bengal Doors	1901	316	78	4,87	2,42	2,45	49·65	
			1902	362	91	5,27	2,69	2,58	51·09	
			1903	443	121	6,58	3,28	3,30	49·87	
			1904	519	171	7,61	3,96	3,65	52·02	
			1905	456	194	8,82	4,35	4,47	49·32	
14	(*a*) to (*d*)	Bhavnagar-Gondal-Junagad-Porbandar.	1901	1,842	245	18,96	10,86	8,10	57·26	
			1902	1,506	245	16,85	10,02	6,83	59·49	
			1903	1,699	264	19,54	9,82	9,72	50·27	
			1904	1,938	302	22,37	10,56	11,81	47·20	
			1905	2,105	284	22,40	10,99	11,41	49·06	
15	(*a*)	Burma	1901	11,651	1,475	1,18,85	68,96	49,89	58·02	
			1902	12,165	1,603	1,25,03	72,30	52,73	57·83	
			1903	14,220	1,860	1,36,14	83,95	52,19	61·66	
			1904	16,118	2,175	1,51,02	85,32	65,70	56·49	
			1905	16,874	2,430	1,57,76	95,95	61,81	60·82	
16	(*a*)	Deoghur	1901	329	13	48	30	18	61·45	
			1902	185	10	30	24	6	79·75	
			1903	262	15	41	30	11	73·17	
			1904	281	14	47	32	15	68·48	
			1905	273	14	45	32	13	71·11	
17	(*a*) & (*b*)	Dibru-Sadiya	1901	290	577	9,99	5,14	4,85	51·50	
			1902	302	510	9,10	4,98	4,12	54·77	
			1903	299	556	9,76	5,26	4,50	53·89	
			1904	339	613	10,04	5,70	4,34	56·75	
			1905	353	642	10,14	5,55	4,59	54·73	
3	(*b*) to (*d*)	Eastern Bengal State ...	1901	*	998	76,43	37,01	39,47	48·40	
			1902	*	1,049	80,81	39,93	40,88	49·41	
			1903	*	*	85,50	44,28	41,22	51·78	* Included with Eastern Bengal State Railway (5′ 6″ gauge).
			1904	*	*	89,55	50,17	39,38*	56·02	
			1905	*	*	89,38	44,68	44,70	49·99	
8	(*c*)	Hyderabad-Godavari Valley...	1901	1,176	527	20,10	10,87	9,23	54·07	
			1902	1,216	587	22,88	13,20	9,68	57·69	
			1903	1,183	546	22,14	13,28	8,86	59·98	
			1904	1,264	349	22,13	14,37	7,75	64·97	
			1905	1,591	373	29,64	16,35	13,29	55·16	
18	(*a*) to (*c*)	Jodhpur-Bikaner ...	1901	1,467	403	22,38	12,44	9,94	55·59	
			1902	1,378	456	25,02	13,06	11,96	52·18	
			1903	1,560	403	27,44	13,24	14,20	48·26	
			1904	1,702	439	30,60	13,51	17,09	44·15	
			1905	1,970	471	35,24	14,91	20,33	42·31	
19	(*a*)	Morvi	1901	303	19	3,59	2,33	1,26	65·00	
			1902	243	19	3,05	1,92	1,13	62·85	
			1903	257	19	2,98	1,53	1,45	51·43	
			1904	298	34	3,55	1,66	1,89	46·73	
			1905	286	49	3,23	1,49	1,74	46·13	
6	(*d*) & (*e*)	Nilgiri and Shoranur-Cochin	1901	76	16	2,41	1,03	1,38	42·87	
			1902	339	40	4,44	2,59	1,85	58·23	
			1903	695	156	6,28	3,56	2,72	56·58	
			1904	724	119	6,83	4,23	2,60	61·87	
			1905	732	105	7,02	4,92	2,10	70·09	

APPENDIX 12—*contd.*

General results of working each railway system—contd.

Numbers. Main head.	Numbers. Sub-head.	Railway.	Year.	Number of passengers carried (in thousands).	Quantity of goods and minerals carried (in thousands of tons).	Gross earnings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	Remarks.
		3′ 3½″ GAUGE—*concld.*								
2	(*b*) & (*g*) to (*m*)	Rajputana-Malwa ...	1901	12,874	2,393	2,84,69	1,31,57	1,53,12	46·21	
			1902	12,091	2,230	2,65,04	1,25,79	1,39,25	47·46	
			1903	12,447	1,976	2,33,74	1,16,11	1,17,63	49·67	
			1904	13,194	2,117	2,41,37	1,14,80	1,26,57	47·56	
			1905	15,223	2,669	2,93,28	1,25,85	1,67,43	42·91	
20	(*a*) & (*b*)	Rohilkund and Kumaon ...	1901	1,539	373	17,57	7,89	9,68	44·90	
			1902	1,592	432	18,64	8,76	9,88	47·00	
			1903	1,546	419	18,16	8,47	9,69	46·65	
			1904	1,673	439	19,15	8,93	10,22	46·63	
			1905	1,772	441	19,88	10,13	9,75	50·96	
21	(*a*) to (*f*)	South Indian ...	1901	14,035	1,683	1,05,26	49,29	55,97	46·40	
			1902	15,387	1,910	1,10,10	50,97	59,13	45·82	
			1903	17,878	3,516	1,28,85	51,81	77,04	40·21	
			1904	19,164	3,508	1,34,40	60,62	73,78	45·10	
			1905	19,383	3,105	1,41,03	69,77	71,26	49·47	
22	(*a*) to (*j*)	Southern Mahratta ...	1901	5,927	967	81,13	57,15	23,97	70·45	
			1902	6,397	1,016	93,17	60,65	32,52	65·09	
			1903	6,698	1,089	95,58	58,96	36,62	61·51	
			1904	7,158	1,331	1,07,95	68,50	39,45	63·46	
			1905	8,404	1,342	1,14,26	69,36	44,90	60·70	
23	(*a*)	Udaipur-Chitor ...	1901	189	28	2,22	1,28	94	57·64	
			1902	179	27	2,17	1,20	97	53·31	
			1903	190	15	1,78	1,11	67	62·63	
			1904	162	11	1,51	98	53	64·86	
			1905	257	16	2,08	1,04	1,04	50·00	
		West of India Portuguese...	1901	250	74	3,68	4,17	— 49	113·20	* Included with the Southern Mahratta railway.
			1902	*	*	*	*	*	*	
			1903	*	*	*	*	*	*	
			1904	*	*	*	*	*	*	
			1905	*	*	*	*	*	*	
		2′ 6″ GAUGE.								
24	(*a*)	Baraset-Basirhat Light ...	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	...	...	...	...	...	...	
			1904	...	...	...	...	...	...	
			1905	295	2	1,11	55	56	49·55	
25	(*a*)	Barsi Light	1901	77	54	1,68	89	79	52·69	
			1902	72	50	1,50	97	53	64·81	
			1903	62	45	1,30	77	53	59·23	
			1904	77	59	1,67	1,02	65	61·09	
			1905	101	82	2,19	80	1,39	36·53	
26	(*a*)	Bukhtiarpore-Behar Light ...	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	118	7	36	21	15	57·74	
			1904	298	25	1,14	48	66	41·90	
			1905	252	19	89	53	36	59·55	
27	(*a*)	Cutch	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	...	...	...	...	...	...	
			1904	...	...	...	...	...	...	
			1905	3	7	22	6	16	27·27	
30	(*a*)	Kalka-Simla	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	6	2	32	25	7	78·09	
			1904	84	25	5,90	3,82	2,08	64·41	
			1905	97	27	7,52	3,51	4,01	46·68	

APPENDIX 12—*concld.*

General results of working each railway system—concld.

Number. Main head.	Number. Sub-head.	Railway.	Year.	Number of passengers carried (in thousands).	Quantity of goods and minerals carried (in thousands of tons).	Gross earnings (in thousands of rupees).	Working expenses (in thousands of rupees).	Net earnings (in thousands of rupees).	Percentage of working expenses to gross earnings.	Remarks.
		2′ 6″ GAUGE—*concld.*								
1	(c)	Mourbhanj	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	...	...	...	...	...	...	
			1904	...	...	...	...	...	...	
			1905	30	13	31	24	7	77·42	
1	(d)	Parlakimedi Light ...	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	52	4	17	27	— 10	155·58	
			1904	59	7	21	22	— 1	106·29	
			1905	68	10	27	23	4	85·19	
20	(c)	Powayan Light ...	1901	222	17	67	47	20	70·00	
			1902	258	24	76	53	23	70·24	
			1903	269	22	72	43	29	60·34	
			1904	272	25	78	47	31	60·34	
			1905	299	30	92	56	36	60·87	
		Ranaghat-Krishnagar Light	1901	226	...	69	54	15	78·03	†Included with the Eastern Bengal State Railway metre and special gauges.
			1902	241	1	76	55	21	71·97	
			1903	248	7	86	53	33	60·86	
			1904	†	†	‡41	‡29	‡12	70·24	
			1905	†	†	†	†	†	†	
32	(a)	Tarakeshwar-Magra Light	1901	419	9	83	58	25	70·23	‡Figures shown only for the first half of the year. Those for the second half have been included with the Eastern Bengal State Railway metre and special gauges.
			1902	428	11	84	59	25	70·52	
			1903	427	17	85	60	25	70·40	
			1904	472	23	90	62	28	69·25	
			1905	456	22	87	65	22	74·71	
33	(a)	Tezpore-Balipara Light	1901	116	8	84	67	17	79·84	
			1902	125	8	85	63	22	74·53	
			1903	145	9	95	67	28	70·72	
			1904	149	8	88	71	17	80·43	
			1905	155	14	103	76	27	73·79	
6	(f)	Tirupattur-Krishnagiri ...	1901	...	...	...	...	...	...	
			1902	...	...	...	...	...	...	
			1903	...	...	...	...	...	...	
			1904	...	...	...	...	...	...	
			1905	37	2	13	14	—1*	107·69	
		2′ 0″ GAUGE.								
35	(a)	Darjeeling-Himalayan	1901	74	31	7,88	4,74	3,14	60·18	
			1902	80	33	8,50	4,72	3,78	55·54	
			1903	109	44	9,62	5,45	4,17	56·65	
			1904	139	44	10,45	5,73	4,72	53·46	
			1905	137	44	9,72	5,61	4,11	57·72	
36	(a)	Howrah-Amta Light	1901	762	14	2,61	1,46	1,15	56·21	
			1902	783	14	2,65	1,32	1,33	49·86	
			1903	808	17	2,77	1,39	1,38	50·32	
			1904	855	13	2,97	1,42	1,55	47·82	
			1905	940	17	3,29	1,51	1,78	45·90	
37	(a)	Howrah-Sheakhala Light	1901	302	4	79	55	24	70·53	
			1902	314	6	82	50	32	61·33	
			1903	343	7	87	52	35	59·85	
			1904	346	6	86	47	39	54·72	
			1905	351	6	88	50	38	56·82	
38	(a)	Jorhat	1901	76	12	83	87	—4	105·01	
			1902	130	12	87	90	—3	104·22	
			1903	155	12	91	77	14	85·02	
			1904	163	10	74	78	—4	105·17	
			1905	167	10	79	76	3	96·20	

APPEN

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Number.		Railway system, *vide* Appendix I.	I.		II.							
			Apparel including drapery, haberdashery, millinery, uniforms, accoutrements, boots and shoes.		Coal and coke carried for the public and foreign railways.		1. Raw.		2.			
									(*a*) Twist and yarn, European.		(*b*) Twist and yarn, Indian.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(*a*), (*b*) & (*c*)	Bengal-Nagpur	307	7,313	1,528,827	36,16,262	21,600	2,79,435	4,771	41,066	15,977	1,39,041
2	(*a*), (*c*) to (*f*) & (*n*) & (*o*)	Bombay, Baroda and Central India	700	16,399	41,809	1,76,724	191,801	20,11,223	324	7,107	15,907	2,33,504
3	...	Eastern Bengal State	1,563	15,969	5,10,868	4,47,623	2,958	14,204	2,553	18,866	4,180	27,050
4	...	East Indian	2,617	92,918	6,142,264	2,02,44,350	83,765	10,29,911	1,054	30,957	18,230	2,02,975
5	...	Great Indian Peninsula	1,274	59,075	215,618	6,55,426	407,858	1,03,06,262	12,741	3,20,153	19,439	2,29,436
6	(*a*) to (*c*)	Madras	417	8,205	355,922	9,02,533	38,559	3,94,210	5,236	52,864	14,444	1,26,412
8	(*a*) & (*b*)	Nizam's Guaranteed State	86	1,463	390,234	11,73,567	6,904	46,134	3,724	41,316	2,322	31,338
9	...	North Western State	4,527	1,06,152	1,48,643	4,01,533	106,126	15,27,382	1,623	33,956	7,381	1,16,716
10	...	Oudh and Rohilkhand State	1,332	15,678	81,598	2,38,951	25,214	1,33,355	2,635	22,358	7,949	58,940
		3′ 3½″ gauge.										
11	...	Assam-Bengal	116	1,158	19,047	52,335	1,397	11,231	866	4,338	98	923
12	...	Bengal and North-Western	953	12,645	91,463	1,97,537	1,147	15,248	599	8,039	5,118	61,472
13	...	Bengal-Dooars	...	...	8,328	37,831	2	41	20	63	15	53
14	...	Bhavnagar-Gondal-Junagad-Porbandar	513	4,089	5,931	6,787	16,676	93,539	38	193	374	4,970
15	...	Burma	472	8,194	539	1,356	6,030	27,496	3,949	73,864	513	6,740
16	...	Deoghur	...	...	2,420	767	...	...	...	...	35	10
17	...	Dibru-Sadiya	...	...	550,055	4,88,742	145	1,422	...	...	...	...
8	(*c*)	Hyderabad-Godavari Valley	60	1,887	6,513	31,385	30,620	3,90,612	413	7,957	1,036	21,000
18	...	Jodhpur-Bikaner	293	4,229	26,514	81,757	14,393	66,178	33	121	639	4,208
6	(*d*) to (*f*)	Madras	34	453	1,723	8,844	383	3,918	58	370	478	1,791
19	...	Morvi	33	232	223	308	1,366	9,379	...	1	50	185
3	(*b*) & (*g*) to (*m*)	Rajputana-Malwa	1,062	27,099	35,922	91,365	112,169	15,33,638	223	3,202	12,968	3,03,799
20	(*a*) & (*b*)	Rohilkund and Kumaon	353	3,468	912	1,038	63	495	17	95	1,295	5,519
21	...	South Indian	266	3,932	31,905	52,631	32,178	1,76,346	2,867	33,957	10,834	79,248
22	...	Southern Mahratta	278	4,207	7,597	35,824	120,111	5,75,200	2,296	30,964	11,400	1,16,427
23	...	Udaipur-Chitor	14	113	...	...	1,868	7,844	...	1	26	167
		2′ 6″ gauge.										
24	...	Baraset-Basirhat	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	1	4	241	260	9,127	23,568	67	309	308	654
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	35	100	2	3	22	148	42	175	...	...
30	...	Kalka-Simla	404	8,624	3,044	30,694	1	16	3	68	1	26
1	(*c*)	Mourbhanj	2	6	40	14	1	5	...	...	3	11
1	(*d*)	Parlakimedi Light	2	5	...	...	3	3	2	1	161	136
20	(*c*)	Powayan Light	...	...	...	...	...	...	...	...	...	...
32	...	Tarakeshwar-Magra	...	...	156	158	...	...	...	...	...	...
33	...	Tezpore-Balipara	...	...	2,196	6,321	9	67	...	...	...	...
		2′ 0″ gauge.										
35	...	Darjeeling-Himalayan	204	5,894	1,357	15,162	6	186	3	92	117	3,406
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...
		TOTAL 1905	17,908	4,09,642	10,202,501	2,89,96,878	1,232,702	1,85,70,036	46,167	5,32,423	151,398	18,36,149
		TOTAL 1904	16,685	3,90,217	9,396,946	2,56,27,600	1,024,713	1,37,19,924	45,273	5,28,470	134,831	15,94,096
		INCREASE	1,223	19,425	805,555	33,69,278	207,989	48,50,112	894	3,953	16,567	2,42,052
		DECREASE	...	...	...	...	...	...	...	...	...	...

DIX 17.

earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production].

III.								IV.		V.								Number.
COTTON.										DRUGS.								
Manufactured.												2. Non-intoxicating.						
(c) Piece-goods, European.		(d) Piece-goods, Indian.		(e) Others.		Total.		Chemicals, excepting saltpetre.		1. Intoxicating, other than opium.		(a) Medicinal preparations.		(b) Others.		Total.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
8,757	1,03,304	5,726	65,135	...	...	56,731	7,07,961	494	5,424	49	925	...	...	1,959	17,387	1,908	18,312	1
16,784	3,50,321	19,752	2,97,594	1,110	22,591	245,078	29,22,340	537	9,509	32	924	72	1,530	3,295	51,456	3,399	53,910	2
26,452	2,52,500	2,053	17,896	2	26	38,198	2,30,542	1,091	9,312	118	2,738	84	1,206	802	11,332	1,004	15,276	3
58,585	15,23,967	7,833	1,40,868	1,743	48,049	171,210	20,77,347	4,093	76,311	101	1,721	654	25,380	3,565	42,422	4,320	69,583	4
33,839	9,22,070	13,990	2,73,356	1,425	40,923	489,352	1,18,94,200	1,512	42,323	188	4,492	277	11,582	3,022	75,822	3,487	91,896	5
7,812	1,01,839	2,267	1,01,960	109	1,093	75,427	7,69,098	353	6,349	10	305	233	7,534	2,924	34,067	3,107	41,906	6
2,636	40,252	1,014	14,593	70	918	16,670	1,74,551	133	2,400	30	423	109	1,947	1,027	8,246	1,166	10,616	8
18,764	5,08,599	37,033	7,73,382	1,235	22,334	172,162	29,82,369	3,963	74,937	453	7,891	647	21,221	8,415	1,14,268	9,514	1,43,370	9
9,194	63,187	5,731	46,921	320	3,725	50,943	3,29,496	225	1,668	106	2,466	237	2,430	932	8,470	1,235	13,366	10
2,878	26,326	264	2,764	18	274	5,521	45,906	233	1,581	11	250	99	1,126	379	2,179	489	3,555	11
18,021	1,76,798	5,824	54,900	351	4,303	31,063	3,29,060	1,334	5,619	96	2,076	95	516	13,132	83,083	13,323	84,675	12
479	3,444	46	396	...	...	562	4,017	...	...	...	...	...	...	264	3,459	264	3,459	13
671	4,853	1,393	9,110	10	74	19,853	1,12,738	67	774	23	346	61	647	78	504	163	1,497	14
7,002	1,15,149	310	7,331	2	14	17,806	2,30,704	122	2,764	...	...	106	2,389	254	3,256	362	5,645	15
210	67	11	4	22	7	276	88	...	...	...	...	...	...	...	...	...	...	16
...	...	...	...	...	...	145	1,422	...	...	512	7,453	...	...	...	...	512	7,452	17
822	14,250	1,242	17,919	5	93	34,138	4,51,831	24	351	11	195	20	353	41	589	72	1,137	8
1,104	9,326	2,436	15,082	57	625	18,662	94,500	77	914	8	125	21	336	287	2,077	316	3,138	18
237	1,183	335	1,345	35	69	1,516	8,676	130	1,344	2	30	11	122	243	1,521	256	1,673	6
76	340	147	628	4	23	1,643	10,556	14	72	164	573	10	93	50	197	224	863	19
16,661	4,08,369	16,300	3,38,403	1,018	25,646	159,239	26,13,248	270	5,159	141	2,967	30	884	1,205	33,412	2,076	37,283	2
478	2,746	1,983	13,519	44	359	3,880	22,733	73	618	50	532	3	46	1,205	9,316	1,258	9,894	20
9,051	1,12,079	4,715	41,625	155	1,362	58,900	4,45,437	145	3,790	61	442	453	5,349	2,085	17,027	2,599	23,818	21
4,978	79,860	6,020	90,410	588	8,076	145,393	8,90,937	691	8,347	49	514	231	3,188	540	6,945	820	10,647	22
218	1,621	435	3,522	13	109	2,500	13,264	...	...	5	51	...	1	49	363	54	415	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
237	629	191	503	13	43	9,963	25,904	16	49	...	...	2	5	37	104	39	109	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	...	...	...	...	64	333	...	...	...	...	...	...	1	2	1	2	27
1	24	195	4,378	219	3,599	420	8,111	...	...	2	54	101	1,962	16	357	119	2,373	30
24	73	2	9	...	...	30	97	1	2	...	...	...	...	3	12	3	12	1
15	15	26	21	...	...	207	176	3	3	...	...	...	...	26	23	26	23	1
122	210	...	...	...	...	122	210	...	...	...	...	...	...	...	...	...	...	20
85	217	...	...	...	...	85	217	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	9	67	...	...	...	...	10	78	...	...	10	78	33
400	10,950	91	3,142	36	925	653	18,701	...	...	...	...	137	2,799	28	890	165	3,689	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
245,593	48,34,385	143,865	23,46,686	8,657	1,95,879	1,626,383	2,84,06,437	15,611	2,58,630	2,221	37,502	3,705	92,724	51,424	5,26,446	57,350	6,58,672	
235,567	46,45,033	135,591	22,83,989	7,599	1,66,722	1,583,574	2,30,38,134	13,773	2,33,014	2,460	38,097	3,224	83,634	44,642	5,02,210	50,326	6,24,741	
10,026	1,88,452	8,274	62,677	1,058	19,157	244,809	53,68,303	1,838	25,606	...	...	481	8,890	6,782	6,236	7,024	33,931	
...	...	...	...	...	...	...	...	...	...	239	1,195	...	...	...	...	...	...	

APPEN

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all

Number.		Railway system, *vide* Appendix I.	VI															
			Dyes and Tans.															
			(1) Alizarine and aniline dyes.		(2) Cutch.		(3) Indigo.		(4) Myrabolams.		(5) Tanning barks.		(6) Turmeric.		(7) Others.		Total.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a), (b) & (e)	Bengal-Nagpur	...	...	...	...	...	...	35,083	3,31,806	...	...	6,755	52,423	3,101	20,467	44,939	4,04,696
2	(a), (c) to (f) & (n) & (o)	Bombay, Baroda and Central India.	1,309	24,183	184	1,633	43	921	169	1,938	685	6,869	2,119	41,371	2,518	42,049	7,027	1,17,963
3	...	Eastern Bengal State	...	...	254	1,723	65	490	...	...	1	9	4,402	26,322	478	2,293	5,200	30,837
4	...	East Indian	103	1,836	1,430	17,883	1,309	25,886	5,625	39,087	4,912	9,117	6,015	1,06,664	4,398	46,731	23,792	2,49,204
5	...	Great Indian Peninsula	1,899	56,745	1,102	26,399	241	6,168	26,627	2,42,154	13,351	67,308	9,671	1,20,876	3,232	46,970	55,213	5,66,120
6	(a) to (c)	Madras	421	5,691	33	308	821	10,886	5,183	22,124	20,665	1,28,664	8,486	53,943	1,145	11,356	36,754	2,31,971
8	(d) & (b)	Nizam's Guaranteed State.	312	3,780	40	318	9	153	201	1,170	3,104	19,663	876	9,864	150	1,906	4,692	35,553
9	...	North Western State	720	22,468	112	750	1,448	36,791	420	4,795	1,475	4,359	4,348	62,348	7,424	94,668	15,947	3,25,974
10	...	Oudh and Rohilkhand State.	124	1,633	401	2,785	89	749	293	1,482	341	1,214	2,444	26,071	463	4,695	4,065	38,629
		3′ 3½″ gauge.																
11	...	Assam-Bengal	...	...	17	85	...	...	...	...	...	...	40	494	3	33	60	612
12	...	Bengal and North-Western.	26	282	1,543	11,709	1,017	9,709	135	1,187	659	2,267	4,080	38,161	802	7,523	8,261	70,863
13	...	Bengal-Dooars	...	...	...	...	...	...	...	...	...	...	6	24	...	...	6	24
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	121	746	7	47	7	40	86	351	3	8	169	822	214	1,169	607	3,183
15	...	Burma	...	...	2,091	21,009	...	9	23	245	648	5,411	899	6,021	163	1,115	3,803	33,810
16	...	Deoghur	...	...	...	...	...	...	...	...	...	...	23	7	...	...	23	7
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley.	28	523	79	1,256	53	915	32	122	205	361	347	4,217	34	415	777	7,809
18	...	Jodhpur-Bikaner	3	9	2	17	110	1,777	12	38	1,539	5,979	433	2,161	2,602	14,678	4,701	24,879
6	(d) to (f.	Madras	...	5	...	...	...	...	48	116	57	175	19	43	102	454	226	792
19	...	Morvi	2	8	...	1	2	7	3	8	...	...	13	53	60	354	80	430
2	(i) & (j) to (m)	Rajputana-Malwa	1,135	30,427	240	2,308	539	5,554	380	3,079	2,065	11,608	2,491	34,190	2,080	36,911	8,930	1,24,577
20	(a) & (b)	Rohilkhund and Kumaon	15	101	909	3,706	9	67	24	115	666	1,554	546	2,467	81	699	2,250	8,709
21	...	South Indian	588	7,067	157	1,092	508	4,330	577	3,586	4,614	37,342	2,160	16,363	1,170	9,468	9,774	79,240
22	...	Southern Mahratta	295	4,737	236	1,946	224	2,293	4,057	21,067	13,907	36,906	7,129	53,789	600	5,218	26,348	1,27,956
23	...	Udaipur-Chitor	18	95	2	3	5	39	4	15	...	2	53	361	39	242	121	757
		2′ 6″ gauge.																
24	...	Barasat-Basirhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	11	35	29	70	...	...	9	22	2	7	540	1,467	53	146	643	1,747
26	...	Bukhtiarpore-Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	...	...	...	...	...	...	...	...	...	...	...	...	2	4	2	4
30	...	Kalka-Simla	...	...	2	44	...	...	...	...	...	...	1	33	29	431	32	508
1	(c)	Mourbhanj	...	...	...	...	...	...	7	12	...	...	6	14	1	3	14	29
1	(d)	Parlakimedi Light	...	...	...	...	...	...	371	316	22	18	127	111	...	...	520	445
20	(c)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	...	Tarakeshwar-Magra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
33	...	Tezpore-Balipara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2′ 0′ gauge.																
35	...	Darjeeling-Himalayan	...	...	4	79	1	24	...	...	...	...	4	75	27	592	36	770
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1905	7,130	1,60,361	8,953	95,176	6,499	1,06,806	79,278	6,75,376	68,821	3,38,740	63,191	6,61,013	30,976	3,50,804	264,847	23,88,008
		Total 1904	6,755	1,88,100	10,127	1,13,233	7,944	1,89,485	77,697	5,72,410	66,787	3,46,569	61,792	6,43,574	25,488	3,31,985	256,590	23,35,346
		Increase	375	...	...	...	...	...	1,581	1,02,966	2,034	...	1,399	17,439	5,482	18,709	8,252	52,752
		Decrease	...	27,739	1,174	18,057	1,445	32,677	...	...	...	7,829	...	...	...	...	...	...

DIX 17—*continued.*

earnings therefrom during the calendar year 1905.

railways in India and is therefore not the same as the total production.]

VII.						VIII.		IX—*(continued on following page).*								Number.
Fodder.								Grain and Pulse.								
(1) Oil-cake.		(2) Hay, straw and grass.		Total.		Fruits and vegetables, fresh.		(1) Gram and pulse.		(2) Jawar and Bajra.		(3) Rice in the husk.		(4) Rice not in the husk.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
4,830	20,830	2,288	11,655	7,118	32,545	9,283	64,702	121,745	10,42,377	2,234	5,491	67,718	2,03,364	346,960	22,77,504	1
2,493	67,584	25,619	4,93,656	108,102	5,60,240	33,605	194,920	77,728	4,12,797	83,353	2,92,847	7,117	41,529	51,331	3,90,637	2
9,377	19,991	17,315	29,153	26,692	49,144	13,169	51,661	73,914	2,40,989	...	...	83,648	2,37,773	97,376	2,08,466	3
32,903	1,53,189	21,908	70,873	54,711	2,24,062	9,855	1,26,503	240,461	14,78,066	37,365	1,81,514	28,712	80,051	243,171	10,30,595	4
27,121	1,59,172	48,406	2,40,863	75,529	4,00,035	19,011	1,60,646	203,790	16,28,749	251,308	23,64,940	2,631	10,985	115,765	8,71,327	5
12,415	52,333	8,782	21,149	21,197	73,487	22,928	1,60,322	100,743	5,98,921	106,416	6,54,907	160,943	7,96,376	266,577	14,55,497	6
1,200	7,490	2,449	6,398	3,649	13,888	2,572	23,511	22,422	93,315	35,490	1,56,908	560	4,565	20,541	1,42,356	8
10,274	44,510	54,546	2,08,147	64,820	2,52,657	25,291	1,62,669	293,669	18,59,778	169,704	13,07,041	29,774	93,364	141,480	9,54,045	9
3,847	17,019	10,524	31,754	14,371	48,773	13,411	50,121	91,623	3,92,402	14,720	59,148	5,767	26,143	47,124	1,90,637	10
2,741	11,488	1,011	3,049	3,752	14,537	1,575	8,868	4,108	26,704	...	...	18,890	72,351	44,657	3,36,608	11
7,221	29,966	7,219	25,657	14,440	54,623	7,406	27,659	76,970	2,66,707	2,691	7,110	39,001	1,18,490	251,436	11,26,968	12
120	964	185	999	305	1,963	33	273	3,103	8,783	...	...	1,434	2,891	6,524	21,555	13
825	4,923	4,561	18,124	5,386	23,043	5,350	24,543	6,196	19,108	36,976	1,19,351	45	86	11,212	43,249	14
2,079	10,363	883	4,158	2,932	14,520	25,924	1,89,703	20,549	1,39,955	1,620	12,900	697,047	34,23,410	78,194	3,47,327	15
9	2	...	...	9	2	...	...	500	140	...	...	45	13	50	14	16
...	...	...	...	...	...	...	...	1,837	12,207	...	...	16,522	65,892	...	...	17
5,135	20,683	82	289	5,217	20,972	259	2,072	18,900	1,18,605	24,902	1,58,869	103	310	10,324	53,923	8
197	567	8,564	16,575	8,761	17,142	1,242	6,959	2,850	52,068	72,346	3,97,997	1,893	7,093	41,612	1,89,617	18
324	978	49	229	373	1,207	678	1,997	2,432	8,842	113	177	2,615	4,339	10,750	40,714	6
3	10	128	364	131	374	177	663	1,681	3,319	3,495	6,135	10	22	335	647	19
7,947	28,336	21,819	79,298	29,766	1,07,634	28,480	2,52,667	147,064	16,11,723	139,069	14,55,075	4,111	26,033	66,030	4,80,864	2
399	1,186	1,449	7,753	1,848	8,939	3,603	28,350	32,999	80,183	5,314	13,443	4,914	14,883	8,782	18,957	20
39,847	1,39,310	4,523	36,532	44,369	1,66,841	40,661	2,08,856	67,580	3,33,952	35,334	2,29,598	167,906	5,91,799	95,092	4,19,163	21
14,313	44,948	7,156	36,328	21,469	81,836	9,904	55,328	59,519	3,43,667	108,608	5,95,915	15,041	54,087	65,481	4,60,844	22
8	25	160	264	168	289	115	660	849	3,767	11	57	1	6	648	3,155	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
129	272	1	3	130	275	44	128	6,552	14,015	15,179	32,199	273	579	1,059	2,337	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	...	...	...	...	...	...	100	351	3,163	10,697	...	...	33	116	27
119	1,524	346	2,887	365	4,411	113	2,313	1,468	17,187	24	313	61	737	625	7,977	33
1	3	18	60	19	63	17	49	25	89	...	...	21	30	1,001	2,814	1
67	52	...	...	67	52	83	71	912	806	8	6	3,293	2,414	2,929	2,764	1
...	...	...	...	...	...	...	...	947	1,314	...	...	...	...	...	...	29
1,507	1,734	6	9	1,513	1,743	1,569	1,619	113	111	...	...	1,516	1,200	135	133	32
655	1,794	...	...	655	1,794	...	...	303	1,479	...	...	336	1,350	...	...	33
35	339	15	241	50	580	121	2,657	1,075	12,509	...	...	23	171	12,636	1,50,441	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
196,031	5,31,663	319,913	13,56,057	514,944	21,86,720	276,655	18,39,752	1,691,686	1,08,59,255	1,169,333	90,53,638	1,360,759	38 87,665	2,049,106	1,11,90,426	
157,105	6,89,514	213,633	10,71,696	370,738	17,61,120	251,561	16,22,167	1,465,187	95,82,745	741,327	49,61,008	1,149,941	48,08,694	1,792,839	94,23,494	
37,926	1,42,149	106,280	2,83,451	144,206	4,25,600	25,094	2,17,585	226,501	12,76,510	428,006	30,92,630	210,818	10,71,773	256,270	17,06,932	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

APPEN

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Number.		Railway system, *vide* Appendix I.	IX.								Hides	
			GRAIN AND PULSE—*concld.*								(a) Dressed or tanned.	
			(5) Wheat.		(6) Wheat flour.		(7) Others.		Total.			
Main head.	*Sub-head*		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.										
1	(*a*), (*b*) & (*e*)	Bengal-Nagpur	136,107	13,19,184	4,275	27,390	3,916	11,933	682,964	48,86,043	...	...
2	(*a*), (*c*) to (*f*) & (*m*) & (*o*)	Bombay, Baroda and Central India	98,353	5,69,031	6,574	54,414	35,456	1,51,644	359,812	19,12,899	7	123
3	...	Eastern Bengal State	4,762	13,690	7,139	72,487	4,130	13,319	270,907	7,96,724	25,058	1,16,378
4	...	East Indian	352,631	24,29,271	36,276	2,00,294	93,346	4,90,490	1,032,302	69,50,981	1,638	10,490
5	...	Great Indian Peninsula	257,977	29,27,305	18,653	1,42,695	32,164	2,04,603	911,228	81,59,604	240	5,398
6	(*a*) to (*c*)	Madras	2,278	13,860	2,124	15,990	79,073	4,78,609	718,754	40,13,060	1,650	17,253
8	(*a*) & (*b*)	Nizam's Guaranteed State	2,393	11,666	1,099	6,428	643	3,004	83,133	4,18,742	9	114
9	...	North Western State	1,137,386	1,40,10,690	54,905	2,39,287	112,501	6,59,126	1,959,439	1,91,23,331	88	631
10	...	Oudh and Rohilkhand State	190,409	10,51,398	12,565	57,723	103,697	4,75,341	485,904	22,45,792	...	...
		3′ 3½″ gauge.										
11	...	Assam-Bengal	71	378	1,805	11,353	59	369	69,390	347,703	...	...
12	...	Bengal and North-Western	59,510	2,40,032	3,594	24,189	153,302	6,35,050	588,594	24,38,536	31	209
13	...	Bengal-Dooars	...	...	467	1,885	1,896	7,204	13,423	42,206	244	1,392
14	...	Bhavnagar-Gondal-Junagad-Porbandar	2,612	7,353	279	1,117	8,220	21,818	65,569	2,12,052	4	35
15	...	Burma	2,778	12,200	7,041	63,660	8,186	73,937	815,095	40,73,289	140	1,258
16	...	Deoghur	90	28	60	17	...	...	745	213	...	...
17	...	Dibru-Sadiya	...	...	...	...	436	2,138	18,795	87,237	...	...
8	(*c*)	Hyderabad-Godavari Valley	19,618	1,23,164	363	944	247	2,143	74,187	4,67,928	...	...
18	...	Jodhpur-Bikaner	35,239	1,44,729	4,218	9,142	39,496	2,25,936	202,551	10,26,645	16	225
6	(*d*) to (*f*)	Madras	45	224	541	4,152	5,393	27,545	30,034	85,993	17	67
19	...	Morvi	539	1,261	41	103	2,183	4,588	8,284	16,008	...	...
2	(*b*) & (*g*) to (*m*)	Rajputana-Malwa	161,501	14,27,352	8,634	58,343	183,479	16,18,723	709,838	66,78,114	29	389
20	(*a*) & (*b*)	Rohilkund and Kumaon	39,441	1,10,663	1,585	5,309	32,675	92,333	125,710	3,43,840	...	...
21	...	South Indian	634	3,398	1,775	9,728	24,589	1,22,054	392,000	17,14,233	883	8,352
22	...	Southern Mahratta	25,198	1,85,119	4,597	56,735	24,025	93,857	302,760	17,90,274	2	11
23	...	Udaipur-Chitor	1,379	6,242	59	278	1,801	7,153	5,109	20,678	2	5
		2′ 6″ gauge.										
24	...	Barsaet-Basirhat	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	9,561	21,099	9	23	52	119	32,985	70,391	...	...
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	12	41	1	4	...	...	3,309	11,209	...	...
30	...	Kalka-Simla	316	3,290	906	10,982	344	3,610	3,744	44,093	1	5
1	(*c*)	Mourbhanj	...	...	11	31	2	3	1,080	2,987	...	...
1	(*d*)	Parlakimedi Light	15	9	4	4	93	79	7,254	6,093	...	...
20	(*c*)	Powayan Light	2,350	3,498	...	...	1,825	2,884	5,122	7,696	...	...
32	...	Tarakeshwar-Magra	...	...	120	164	...	...	1,281	1,607	...	...
33	...	Tezpore-Balipara	...	...	...	...	...	...	642	2,834	...	...
		2′ 0″ gauge.										
35	...	Darjeeling-Himalayan	...	9	1,151	20,945	296	4,487	15,181	1,28,568	...	2
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...
		Total 1905	2,573,391	2,46,35,824	181,961	11,55,884	953,275	51,35,150	9,979,513	6,71,50,827	30,059	1,62,406
		Total 1904	3,047,360	3,60,64,329	168,668	11,45,474	470,022	24,97,398	9,435,313	6,84,73,340	28,335	1,47,231
		Increase	...	...	13,293	10,390	483,253	29,47,752	544,175	...	1,724	15,175
		Decrease	1,073,968	1,14,28,505	...	...	...	...	...	13,22,513	...	...

DIX 17—*continued.*

earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

X. HIDES AND SKINS.								XI.		XII.		XIII. JUTE.						Number.
(1) Of Cattle.		(2) Skins of Sheep and other Animals.				Total.		Horns.		Hemp (Indian) and other fibres, excluding jute.		(1) Raw.		(2) Gunny bags and cloth.		Total.		
(b) Raw.		(a) Dressed or tanned.		(b) Raw.														Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
10,380	1,12,111	...	...	...	...	10,380	1,12,111	421	2,621	6,931	46,653	10,434	18,825	27,539	2,68,161	37,673	2,86,986	1
1,607	17,565	8	139	3,084	34,408	4,706	52,235	84	1,374	1,627	21,241	474	7,102	11,276	73,839	11,750	80,941	3
243	1,401	3,063	16,643	53	367	29,420	1,34,787	126	634	15,165	41,060	774,313	53,77,776	20,677	67,289	794,990	54,45,065	3
27,160	4,23,608	165	3,829	16,459	2,55,605	45,422	6,93,532	566	6,065	20,956	1,94,351	133,424	7,39,251	-58,339	2,67,974	190,763	10,07,225	4
4,462	67,022	39	617	12,865	1,57,607	17,606	2,30,644	1,550	22,477	9,606	1,14,816	1,391	17,155	31,790	3,39,090	33,181	3,56,245	5
5,640	44,855	5,648	70,772	37,884	2,50,102	49,822	3,32,982	758	6,575	7,231	44,062	113	897	16,044	1,25,628	16,157	1,26,525	6
535	4,915	...	5	3,287	21,644	2,831	26,682	309	2,657	419	3,335	5	61	2,944	21,758	2,949	21,819	8
12,494	1,40,499	143	1,531	15,913	1,54,134	28,638	2,96,795	337	2,959	680	5,583	174	1,519	48,582	3,84,433	48,756	3,85,953	9
6,128	42,318	...	...	3,788	17,749	9,916	60,097	465	1,731	11,082	33,804	196	1,278	12,344	71,798	12,540	73,076	10
734	8,765	...	...	48	455	782	9,220	13	191	364	1,203	99,223	2,22,761	1,008	6,202	91,231	2,28,963	11
8,973	58,382	17	132	3,752	24,246	12,773	83,059	124	898	1,171	4,554	3,783	24,545	17,545	1,01,438	21,328	1,25,983	12
...	...	...	...	...	...	244	1,322	...	...	...	...	12,079	38,759	11	18	12,091	38,777	13
149	1,030	17	177	462	2,673	631	3,915	7	48	1	4	...	6	1,751	5,621	1,751	5,627	14
2,456	22,460	6	68	38	359	2,640	24,144	31	413	1	22	14	245	17,470	69,758	17,484	70,003	15
...	...	...	...	...	...	...	...	...	...	25	8	...	...	50	15	50	15	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17
196	2,594	1	9	613	6,346	810	8,950	30	454	70	729	...	4	2,863	24,825	2,863	24,829	8
707	6,650	...	6	1,309	8,459	2,092	15,339	4	25	38	175	19	155	3,475	14,597	3,494	14,752	18
72	266	1	3	609	1,467	690	1,803	9	23	271	966	...	...	515	1,637	515	1,637	6
35	116	...	...	52	208	87	324	2	13	37	103	...	...	147	466	147	466	19
2,547	30,676	21	226	6,587	74,800	9,294	1,06,071	48	643	2,373	13,853	783	6,233	16,072	1,11,124	17,755	1,17,407	2
1,115	5,796	...	...	539	2,308	1,653	8,094	73	369	1,950	8,382	3	10	2,024	9,692	2,927	9,711	20
3,261	24,769	1,251	20,283	5,987	38,149	11,382	91,553	212	1,646	3,699	53,379	44	317	11,195	55,420	11,238	55,737	21
1,782	12,769	249	1,124	9,083	64,300	11,116	78,274	438	3,941	2,320	19,016	2	26	9,010	55,432	9,012	55,458	22
44	188	...	...	135	677	181	870	...	2	16	67	1	8	155	678	156	686	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
3	8	...	...	98	229	101	237	6	15	9	27	1	3	1,229	2,901	1,230	2,904	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	10	7	10	27
5	61	1	21	5	70	12	157	1	28	15	224	1	19	108	1,706	109	1,725	30
...	...	...	...	2	5	2	5	...	...	...	...	...	...	32	106	32	106	1
296	248	...	...	...	...	296	248	1	1	...	...	...	...	105	96	105	98	1
...	...	...	...	...	...	...	...	...	...	763	1,444	...	...	...	...	...	...	20
34	78	...	...	...	...	34	78	...	...	...	...	1,140	1,366	4	7	1,144	1,373	32
...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	1	2	33
310	3,942	...	...	5	70	315	4,014	6	123	...	...	2	48	205	2,255	207	2,303	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
91,527	10,33,122	10,633	1,15,055	111,656	11,16,429	243,875	24,27,612	5,621	55,820	92,810	6,06,663	1,027,330	64,58,430	316,315	26,83,974	1,343,635	91,42,404	...
81,986	8,86,102	9,485	1,03,910	83,962	8,22,433	203,768	19,59,720	5,200	53,665	67,156	4,95,378	1,025,493	60,96,622	314,201	27,24,127	1,339,694	88,20,749	...
9,541	1,47,020	1,148	11,745	27,694	2,93,946	40,107	4,07,886	421	2,161	25,654	1,12,685	1,827	3,61,808	2,114	...	3,941	3,21,955	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	40,153	...	...	...

APPEN

Principal commodities carried by railways and the

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Number.		Railway system, *vide* Appendix I.	XIV.		XV.									
			Lac.		LEATHER.									
					(1) Unwrought.		(2) Wrought, excepting boots and shoes.		Total.		(1) Ale and beer.		(2) Wines and spirits of all kinds including country spirit.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.												
1	(*a*), (*b*) & (*e*)	Bengal-Nagpur	10,312	85,513	1,245	8,776	...	...	145	8,776	760	3,025	1,225	11,408
2	(*a*) (*c*) *to*(*f*) & (*n*) & (*o*)	Bombay, Baroda and Central India ...	64	628	989	14,197	949	15,315	1,938	29,512	1,198	14,961	3,683	32,795
3	...	Eastern Bengal State	1,207	7,435	...	...	6	50	6	50	404	4,193	1,081	15,120
4	...	East Indian	24,107	3,78,285	682	23,830	1,060	35,653	1,942	65,482	6,947	78,082	2,507	79,153
5	...	Great Indian Peninsula	935	9,404	905	14,380	1,301	40,395	2,206	54,775	9,848	1,37,133	7,894	1,07,753
6	(*a*) to (*c*)	Madras "...	165	1,816	1,543	20,780	2,955	39,018	4,498	59,778	3,219	33,562	6,038	47,042
8	(*a*) & (*b*)	Nizam's Guaranteed State	21	190	1,156	16,704	142	1,686	1,298	18,450	1,726	15,952	312	6,225
9	...	North Western State	975	15,946	2,700	40,834	1,625	41,773	4,325	82,607	9,327	1,25,497	5,529	1,49,294
10	...	Oudh and Rohilkhand State	578	3,553	9	109	139	1,223	148	1,332	5,676	21,944	2,574	35,703
		3′ 3½″ gauge.												
11	...	Assam-Bengal	819	6,911	...	...	4	70	4	70	101	862	206	2,031
12	...	Bengal and North-Western	2,281	13,410	133	508	145	1,276	278	1,784	63	395	232	2,669
13	...	Bengal-Dooars	5	92	...	...	...	...	...	...	...	...	1	8
14	...	Bhavnagar-Gondal-Junagad-Porbandar	24	86	225	1,292	35	267	260	1,559	40	263	157	1,488
15	...	Burma...	1,237	19,095	42	567	64	1,428	106	1,995	2,415	22,908	742	11,947
16	...	Deoghur	90	29	...	...	...	...	...	...	...	...	10	3
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	70	955	...	...
8	(*c*)	Hyderabad-Godavari Valley	9	118	12	123	57	789	69	912	35	151	43	497
18	...	Jodhpur-Bikaner	387	1,998	117	1,279	141	1,583	258	2,862	71	661	61	797
6	(*d*) to (*f*)	Madras	...	...	3	85	3	11	6	96	1,009	3,995	300	2,517
19	...	Morvi	4	13	...	3	23	100	23	103	1	3	3	24
2	(*b*) & (*g*) to (*m*)	Rajputana-Malwa	485	4,911	936	13,141	346	8,463	1,281	19,604	2,947	23,939	1,518	23,374
20	(*a*) & (*b*)	Rohilkund and Kumaon	167	848	5	35	25	197	30	232	1,151	6,312	176	2,259
21	...	South Indian	203	1,239	12	39	13	173	25	212	333	2,189	3,464	25,604
22	...	Southern Mahratta	62	874	939	9,303	161	1,319	1,150	10,622	1,397	11,393	2,910	21,337
23	...	Udaipur-Chitor	1	9	17	97	10	75	27	172	1	21	8	85
		2′ 6″ gauge.												
24	...	Baraset-Basirhat	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	...	...	...	1	5	19	5	20	...	...	5	15
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	...	...	8	30	...	...	8	30	...	...	...	...
30	...	Kalka-Simla	...	10	6	118	21	542	27	660	1,703	10,706	142	2,793
1	(*e*)	Mourbhanj	...	...	...	...	...	...	...	...	...	1	...	...
1	(*d*)	Parlakimedi Light	...	...	...	...	...	...	...	...	1	2	70	51
20	(*e*)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...
32	...	Tarakeshwar-Magra	1	1	...	...	...	...	...	...	...	...	...	...
33	...	Tezpore-Balipara	...	...	...	...	...	...	...	...	...	...	23	151
		2′ 0″ gauge.												
35	...	Darjeeling-Himalayan	1	32	2	49	4	121	6	170	728	6,517	167	5,112
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1905 ...	44,140	5,52,436	11,934	1,70,520	9,234	1,91,545	21,170	3,62,065	51,171	5,24,723	41,081	5,37,235
		TOTAL 1904 ...	41,612	4,45,208	10,993	1,73,350	5,497	1,02,732	16,490	2,76,082	52,150	5,09,499	36,663	5,56,596
		INCREASE ...	2,528	1,07,228	953	...	3,737	88,813	4,680	85,983	...	15,224	4,418	30,639
		DECREASE ...	...	...	...	2,830	...	...	...	...	979	...	...	...

DIX 17—*continued.*

earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

XVI				XVII—(*contd. on following page*).														Number.
LIQUORS.				METALS.														
(3) All other sorts, including toddy and fermented liquor other than ale and beer.		Total.		(1) Brass, unwrought.		(2) Brass, wrought.		(3) Copper, unwrought.		(4) Copper, wrought.		(5) IRON AND STEEL.						
												(a) Cast.		(b) Unwrought.		(c) Wrought.		Main head.
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
...	...	1,985	14,523	...	...	1,969	21,477	...	...	330	3,310	559	7,064	...	...	25,747	1,25,185	1
412	2,547	5,293	50,303	1,864	25,979	794	10,601	824	11,427	480	6,735	1,676	22,094	619	6,240	25,197	2,77,448	2
...	...	1,485	19,313	347	3,148	2,422	21,505	264	1,466	1,026	4,345	604	1,371	245	658	31,161	1,83,893	3
386	2,483	9,840	1,59,718	1,259	18,783	7,671	84,468	113	2,406	822	19,235	20,864	1,70,314	64,753	1,12,153	57,550	5,63,751	4
113	571	17,855	3,45,457	3,927	75,051	2,634	53,577	1,300	22,937	1,754	33,736	3,841	45,999	12,696	1,89,099	49,364	7,84,143	5
3,303	11,585	12,560	92,209	663	6,241	1,611	16,597	93	1,017	229	2,296	875	3,021	1,985	17,122	20,008	1,71,323	6
1,950	8,509	3,988	29,786	125	943	345	3,663	223	1,418	86	983	240	2,488	2,801	19,521	1,899	21,173	8
410	5,395	15,266	2,80,176	950	8,387	2,181	33,218	283	3,907	1,214	18,088	1,267	18,514	1,496	11,595	45,298	7,16,781	9
...	...	8,250	57,647	238	1,244	3,613	24,807	22	194	326	2,109	1,230	6,689	9	11	13,956	78,892	10
...	...	307	2,893	...	...	243	2,057	...	...	7	39	84	459	17	86	2,778	24,122	11
...	...	295	3,064	160	1,213	1,725	13,006	5	31	136	1,778	903	6,581	407	2,109	7,855	44,723	12
...	...	1	8	...	...	3	12	...	...	...	...	...	...	...	...	1,063	8,220	13
...	...	197	1,751	266	685	292	1,727	80	374	97	756	253	1,040	236	1,133	1,060	6,231	14
2	16	3,159	34,771	53	669	243	3,452	18	226	87	1,187	305	3,079	86	491	6,468	54,792	15
...	...	10	3	10	3	25	7	...	...	...	...	150	47	100	32	50	14	16
...	...	70	955	...	...	...	...	...	...	...	...	2,396	20,315	...	...	...	...	17
789	4,474	867	5,112	22	169	190	2,402	1	12	18	240	79	981	764	7,327	2,205	24,058	8
26	233	153	1,691	15	99	176	1,384	7	79	67	468	19	130	217	965	2,748	14,680	18
83	427	1,397	6,939	1	2	20	125	4	20	23	124	27	213	82	167	1,436	6,898	6
19	131	23	156	1	4	22	120	...	...	9	39	94	331	...	...	293	1,349	19
83	486	4,548	47,790	2,086	45,071	2,062	22,443	851	19,537	429	5,420	1,168	14,469	1,345	7,902	20,142	2,03,866	2
...	...	1,327	8,571	75	318	317	1,866	4	16	58	384	239	792	76	356	3,067	15,907	20
721	3,568	4,518	31,351	1,047	7,747	927	10,219	132	1,195	108	1,313	292	4,251	2,319	12,968	9,463	75,809	21
6,348	26,653	10,655	59,383	283	3,521	1,174	11,836	274	3,540	639	6,322	770	6,440	5,930	34,450	5,866	53,590	22
...	...	9	106	1	10	19	139	...	3	4	25	2	6	9	54	206	1,162	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
...	...	5	15	4	9	44	123	2	5	35	96	1	3	143	334	833	1,939	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	...	...	1	2	1	3	...	...	...	...	45	130	...	...	...	...	27
7	203	1,352	13,702	3	56	26	410	...	2	5	101	198	3,430	129	2,118	590	9,314	30
4	13	4	14	...	...	3	8	...	...	...	6	1	2	...	...	16	43	1
...	...	71	53	...	...	6	6	...	...	1	1	8	43	...	...	92	70	I
...	...	...	...	...	...	...	...	...	...	...	...	214	363	...	...	...	...	20
...	...	...	...	...	...	11	24	...	...	...	...	...	...	...	...	...	...	32
...	...	23	151	...	...	...	...	49	354	...	...	...	...	...	...	...	...	33
...	...	895	11,639	...	...	41	903	...	...	18	409	34	748	...	...	440	9,415	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
14,661	67,294	106,913	11,79,252	13,401	2,00,254	30,808	3,42,144	4,552	70,156	8,008	1,08,544	37,438	3,40,295	96,406	4,27,389	336,360	34,93,404	
13,681	63,231	102,494	11,29,326	14,376	2,21,810	29,513	3,24,234	6,255	1,06,735	6,562	99,495	34,344	3,51,110	69,321	4,51,591	301,455	33,15,327	
980	4,063	4,419	49,926	...	...	1,295	17,910	...	...	1,446	9,049	3,094	...	27,055	...	35,405	1,78,077	
...	...	...	...	975	21,556	...	...	1,703	36,579	...	...	...	10,815	...	24,302	...	...	

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Numbers.		Railway system, *vide* Appendix I.	XVII. Metals—*concluded.* (5) Iron and steel—*concluded.* (d) Manufactures.		(6) Others.		Total.		XVIII. Oils. (1) Kerosine.		(2) Castor.		(3) Cocoanut.		(4) Mustard and rape.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a), (b) & (c)	Bengal-Nagpur	3,593	45,787	239,027	3,14,454	271,224	5,17,277	27,872	2,74,311	2,595	21,473	1,389	10,044	...	...
2	(a), (c) to (f), & (n) & (o).	Bombay, Baroda and Central India.	14,261	2,09,910	33,547	1,61,359	79,162	7,31,793	15,728	1,65,365	1,177	13,113	802	10,709	390	2,097
3	...	Eastern Bengal State	11,217	52,557	4,762	27,626	53,068	2,96,569	145,340	3,12,607	89	632	1,286	9,317	5,900	39,808
4	...	East Indian	19,847	3,18,912	6,769	1,43,093	178,658	13,51,114	88,751	7,99,655	3,329	19,272	2,058	18,790	6,546	73,026
5	...	Great Indian Peninsula	14,678	3,23,874	170,634	13,14,134	259,820	28,46,940	55,998	7,59,924	1,755	18,040	2,991	51,107	51	608
6	(a) to (e)	Madras	11,763	1,10,794	2,035	20,335	39,262	3,48,745	31,763	2,17,865	4,489	16,196	4,677	42,630	16	104
8	(a) & (b)	Nizam's Guaranteed State	914	11,802	756	8,569	7,389	70,560	4,556	35,236	198	1,629	238	2,999	5	92
9	...	North Western State	16,249	3,31,174	5,791	83,152	74,669	12,27,816	19,316	3,88,310	621	5,294	1,089	15,500	3,307	29,616
10	...	Oudh and Rohilkhand State	3,360	22,211	847	4,677	23,501	1,35,834	16,890	83,527	203	1,013	185	980	1,479	12,753
		3′ 3½″ gauge.														
11	...	Assam-Bengal	1,680	17,569	1,376	13,137	6,155	57,469	15,204	49,330	40	327	94	733	1,038	9,554
12	...	Bengal and North-Western	5,378	35,845	2,764	21,739	19,333	1,26,930	24,889	1,00,485	362	2,234	202	1,586	563	4,641
13	...	Bengal Dooars	154	1,106	199	3,757	1,419	13,095	2,048	8,280	6	5	2	8	287	1,700
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	662	4,033	249	1,254	3,195	17,232	3,503	11,796	132	628	104	524	115	234
15	...	Burma	8,233	90,880	231	2,256	15,713	1,57,032	8,992	79,224	96	1,554	898	9,803	16	223
16	...	Deoghur	...	...	...	...	335	103	125	39	12	3	5	2	8	3
17	...	Dibru-Sadiya	...	...	629	7,111	3,225	27,426	7,313	18,320	...	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley	369	4,167	188	2,814	3,835	42,170	1,328	11,299	80	598	139	1,458	2	4
18	...	Jodhpur-Bikaner	569	4,673	271	2,903	4,189	25,231	810	4,922	218	1,320	40	204	161	740
6	(d) to (f)	Madras	362	2,534	67	677	2,022	10,760	1,262	4,324	24	52	790	2,540	...	...
19	...	Morvi	128	592	39	199	586	2,634	181	451	10	22	12	46	18	72
2	(b) & (g) to (m)	Rajputana-Malwa	4,796	71,110	34,081	95,370	66,963	4,75,187	9,242	77,335	1,109	7,339	461	8,511	560	3,389
20	(a) & (b)	Rohilkund and Kumaon	191	1,325	249	1,166	4,296	22,130	2,136	6,645	50	173	5	28	142	818
21	...	South Indian	6,805	75,557	1,471	13,917	22,564	2,02,935	25,055	1,42,517	3,320	22,908	1,231	5,579	411	1,644
22	...	Southern Mahratta	4,317	48,147	5,475	37,130	24,728	2,04,976	27,003	1,70,576	868	6,599	1,823	10,903	...	...
23	...	Udaipur-Chitor	26	173	44	234	311	1,806	139	1,023	6	22	5	24	...	1
		2′ 6″ gauge.														
24	...	Barasat-Basirhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	117	343	19	56	1,197	3,958	420	976	3	11	92	254	...	...
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	...	...	...	...	47	135	5	15	...	...	5	14	...	...
30	...	Kalka-Simla	192	3,913	78	2,107	1,221	21,941	439	6,233	3	43	1	31	2	46
1	(c)	Mourbhanj	5	22	3	6	28	86	14	46	...	...	...	...	...	...
1	(d)	Parlakimedi Light	1	2	11	14	119	135	209	116	1	1	2	3	...	...
20	(c)	Powayan Light	...	...	...	...	214	362	...	...	...	...	...	...	...	...
32	...	Tarakeshwar-Magra	9	15	...	...	20	39	33	52	...	...	...	...	181	241
33	...	Tezpore-Balipara	...	...	...	...	49	354	...	...	...	...	...	...	...	...
		2′ 0″ gauge.														
35	...	Darjeeling-Himalayan	523	10,363	169	3,783	1,225	25,681	812	12,375	5	71	4	32	443	6,354
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1905	129,298	17,07,390	512,001	22,75,929	1,168,772	89,65,505	537,326	37,53,129	19,792	1,41,070	20,629	2,04,469	21,641	1,87,769
		Total 1904	112,312	14,10,766	295,643	14,37,778	869,781	77,18,346	506,663	35,42,021	20,605	1,34,146	16,426	1,59,226	16,535	1,39,020
		Increase	16,986	2,96,624	216,358	8,38,151	298,991	12,46,859	30,663	2,11,108	...	6,924	4,203	45,243	5,106	48,749
		Decrease	...	...	...	...	...	...	...	...	813	...	...	...	...	...

DIX 17—*continued.*

the earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

XIX—(continued on following page).

Nursery.	Oil-seeds.																
	(1) Castor.		(2) Earthnuts.		(3) Linseed.		(4) Poppy.		(5) Rape and mustard.		(6) Til or jinjili.		(7) Cotton seed.		Total.		(5) Others.	
Main head.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	...	...	...	...	21,301	2,07,592	...	...	9,204	75,953	22,720	1,95,099	...	...	34,492	3,24,682	2,636	18,854
2	24,762	2,08,291	1,940	15,446	8,146	81,278	8,244	57,382	20,040	1,61,106	27,514	2,13,105	...	...	22,941	2,40,967	4,844	49,684
3	362	694	...	...	17,919	59,129	...	...	36,081	1,19,692	827	2,796	...	...	153,741	3,65,080	1,126	2,716
4	30,332	2,04,535	175	1,059	104,179	7,57,442	38,234	2,76,685	130,259	10,60,819	15,243	1,10,529	44,601	2,13,035	102,975	9,59,650	3,300	46,907
5	14,040	93,763	11,907	1,34,281	151,753	17,73,016	14,143	1,23,363	16,137	1,89,156	80,909	9,19,398	186,336	19,85,593	81,030	10,62,518	20,235	2,23,839
6	37,670	1,04,015	3,122	13,057	418	1,570	51	442	694	4,888	25,926	1,13,133	...	...	51,621	3,40,841	10,676	64,046
8	45,569	2,42,204	53	373	9,020	21,421	133	656	156	710	18,583	1,10,905	5,622	23,364	5,535	44,937	538	4,931
9	960	5,040	329	4,079	2,163	19,694	534	3,302	50,117	3,98,203	18,060	1,49,823	69,950	4,31,240	29,471	4,88,704	5,138	49,984
10	4,273	18,102	69	447	5,661	21,607	14,942	63,577	9,223	39,735	4,194	17,606	...	...	19,453	1,02,796	695	4,523
11	11	25	4	16	63	194	5	14	2,774	10,603	1,350	3,884	9	76	16,557	61,493	181	1,489
12	4,789	14,382	50	186	36,943	1,51,747	7,097	37,167	38,139	2,02,648	308	1,342	...	...	26,320	1,11,255	304	2,309
13	...	...	...	...	...	...	...	...	1,738	5,191	...	...	...	...	2,349	9,995	6	2
14	2,796	9,965	201	1,373	4	10	280	739	624	4,885	4,645	11,782	...	...	4,665	16,410	711	3,228
	15	192	1,508	10,426	6	38	2	35	8	77	6,293	32,619	...	...	1,75,595	19,418	9,416	84,791
	30	10	...	...	10	3	8	3	30	10	4	2	...	...	72	230	80	24
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18,220	7,213	...	...
15	354	1,939	101	788	33,966	2,28,765	48	292	209	1,649	2,887	21,063	23,114	1,46,968	38,086	3,852	2,304	24,727
16	...	1	34	196	...	7	3	12	2,689	12,109	9,372	34,420	...	...	12,372	2,008	779	4,686
17	4	23	56	193	...	...	...	...	2	5	496	843	...	...	8,945	2,953	883	2,029
18	...	...	8	30	...	...	1	1	...	...	1,435	2,896	1,212	2,200	1,132	352	131	541
19	19,880	43,885	1,173	14,030	7,049	43,307	10,309	61,371	31,693	1,78,534	25,040	1,65,940	...	...	1,18,218	13,435	2,063	21,646
20	2,558	6,456	18	104	1,200	2,362	1,705	2,409	4,735	16,057	711	1,955	...	...	8,205	2,391	59	541
21	4,436	25,212	98,491	1,40,502	2	24	21	142	1,018	5,739	25,952	1,54,090	...	...	2,19,249	41,820	11,803	46,601
22	6,227	33,372	3,377	19,208	8,403	57,746	462	4,579	663	3,920	15,088	97,161	26,771	1,32,268	2,43,352	37,178	7,484	55,274
23	...	...	9	67	23	67	462	997	...	...	209	657	...	...	212	1,122	12	52
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	309	691	2,222	5,067	14,551	31,364	14	34	354	809	979	2,100	2,413	5,153	3,430	2,189	820	2,189
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	45	11	...	...	...	...	...	...	...	...	11	39	...	...	10	29	...	...
30	...	1	...	...	1	17	...	...	...	4	...	5	9	102	474	6,938	29	633
31	...	...	...	...	3	8	...	...	9	45	...	2	...	...	15	50	1	4
32	...	...	...	...	3	2	...	...	26	22	160	102	...	...	221	127	9	7
33	...	...	...	...	...	...	...	...	231	367	...	...	...	...	...	...	...	...
34	...	...	...	...	...	...	...	...	195	256	...	...	...	...	214	293	...	...
35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39	254	39	254
36	...	...	...	...	1	20	...	...	2	48	...	3	...	...	1,434	1,318	84	1,434
37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	199,415	10,12,962	124,905	3,70,919	422,797	34,58,420	96,698	7,12,181	357,120	24,93,237	308,836	23,61,009	380,027	29,41,904	6,05,282	50,05,282	86,384	7,18,845
	265,360	14,20,604	153,468	3,54,906	870,523	66,44,226	137,092	10,86,007	556,619	44,40,621	406,281	31,87,489	289,564	20,60,310	635,317	45,10,633	75,088	5,36,240
	...	...	...	16,013	...	...	...	...	...	...	...	...	110,463	8,81,594	50,455	4,04,629	11,298	1,82,605
	65,945	4,07,642	28,563	...	447,726	31,85,806	40,394	3,73,826	199,499	19,47,384	97,445	8,26,481	...	...	...	...	...	...

APPEN

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Number.		Railway system, *vide* Appendix I.	XIX. Oil-seeds—*concluded.* (3) Others.		Total.		XX. Opium.		XXI. Paper and pasteboard.		XXII. Provi (1) Dried fruits and nuts.		(2) Ghee.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a), (b) & (e).	Bengal-Nagpur	16,142	73,465	69,387	5,53,106	72	2,118	1,217	19,542	10,313	78,321	3,854	47,864
2	(a), (c) to (f) & (n) & (o).	Bombay, Baroda and Central India.	7,393	63,762	98,089	7,99,370	1,423	50,546	2,298	35,146	20,256	2,22,243	5,771	71,806
3	...	Eastern Bengal State	653	2,668	55,842	1,84,979	9	82	7,690	9,268	435	1,922	669	5,040
4	...	East Indian	9,407	63,613	373,430	26,87,697	6,697	2,07,591	10,229	1,76,937	6,404	89,864	18,849	3,98,719
5	...	Great Indian Peninsula	28,252	2,56,271	503,467	55,33,040	503	24,404	3,110	50,794	39,675	6,20,881	14,115	1,86,276
6	(a) to (c)	Madras	60,961	3,42,758	128,863	5,78,963	109	1,953	1,226	17,197	12,377	47,754	5,304	50,150
8	(a) & (b)	Nizam's Guaranteed State	4,359	13,097	83,435	4,12,340	40	1,589	674	7,935	10,977	87,995	671	7,966
9	...	North Western State	68,422	8,49,290	231,455	18,61,261	71	957	3,430	57,128	23,840	4,16,016	11,303	1,29,822
10	...	Oudh and Rohilkhand State	18,163	76,318	56,525	2,37,452	1,477	33,488	2,410	14,420	1,964	16,849	3,249	19,084
		3′ 3½″ gauge.												
11	...	Assam-Bengal	22	160	4,838	14,971	1	18	114	585	860	5,808	223	1,907
12	...	Bengal and North-Western	7,861	35,726	95,177	4,43,198	7,531	1,02,495	3,230	8,140	1,262	15,554	3,691	32,986
13	...	Bengal Dooars	...	...	1,783	5,191	...	...	...	...	...	...	...	...
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	15,535	48,495	24,375	77,248	11	188	198	1,167	2,490	10,882	1,652	11,434
15	...	Burma	1	67	7,891	43,654	28	441	576	8,164	902	7,765	1,034	14,763
16	...	Deoghur	40	12	122	40	...	...	...	...	...	...	40	12
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	665	5,032	...	...
8	(c)	Hyderabad-Godavari Valley	5,453	32,590	66,132	4,36,053	13	708	216	2,767	1,952	21,315	590	7,143
18	...	Jodhpur-Bikaner	12,916	47,246	24,014	93,993	68	472	83	734	2,689	12,483	6,113	51,935
6	(d) to (f)	Madras	1,783	3,506	2,341	4,670	36	56	48	278	65	228	265	841
19	...	Morvi	127	265	2,783	5,392	9	71	59	310	106	368	65	244
2	(b) & (g) to (m).	Rajputana-Malwa	7,897	45,004	103,041	5,72,071	2,477	43,490	1,815	30,663	13,901	1,72,824	9,526	1,03,492
20	(a) & (b)	Rohilkund and Kumaon	57	172	11,034	29,435	182	1,644	115	435	168	1,288	219	1,125
21	...	South Indian	3,519	12,530	133,439	3,47,429	...	...	2,117	39,108	478	3,360	1,215	9,335
22	...	Southern Mahratta	8,187	33,719	69,198	3,81,973	...	15	707	9,001	29,815	2,12,327	5,188	39,233
23	...	Udaipur-Chitor	211	933	933	2,711	120	757	38	254	436	2,365	146	771
		2′ 6″ gauge.												
24	...	Barasat-Basirhat	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	1,329	3,903	22,681	49,110	...	...	40	119	550	1,490	59	184
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	...	...	56	56	...	...	4	12	321	1,132	5	14
30	...	Kalka-Simla	15	268	25	402	7	183	269	7,775	46	845	50	785
1	(c)	Mourbhanj	289	919	300	1,004	...	...	12	51	1	5	6	15
1	(d)	Parlakimedi Light	98	82	290	211	...	...	1	4	3	6	...	...
20	(c)	Towayan Light	...	...	231	367	...	...	...	...	...	...	...	...
33	...	Tarakeshwar-Magra	...	...	195	256	...	...	8	8	...	...	20	35
33	...	Tezpore-Balipara	7	54	7	54	...	...	...	...	...	...	23	143
		2′ 0″ gauge.												
35	...	Darjeeling-Himalayan	...	...	3	71	...	8	100	2,799	31	663	19	354
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...
		Total 1905	279,918	10,05,923	2,169,716	1,53,56,554	22,884	4,72,179	42,094	5,00,688	182,866	20,67,516	93,904	11,91,251
		Total 1904	266,825	20,80,380	2,925,732	2,12,74,543	24,193	5,21,353	44,194	5,17,180	193,561	21,65,527	98,537	12,23,029
		Increase	13,093	...	...	...	...	...	...	...	...	...	...	...
		Decrease	...	74,457	756,016	59,17,989	1,309	49,174	2,100	16,492	10,695	1,08,011	4,633	32,078

DIX 17—*continued.*

the earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

SIONS.				XXIII. RAILWAY PLANT AND ROLLING-STOCK CARRIED FOR THE PUBLIC AND FOREIGN RAILWAYS.												XXIV.		NUMBERS.
(3) Others.		Total.		(1) Locomotive engines and tenders and parts thereof.		(2) Carriages and trucks and parts thereof.		(3) *Materials.* (a) Steel rails and fish-plates.		(b) Sleepers and keys of steel and cast-iron.		(c) Others.		Total.		Salt.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
4,397	60,136	18,504	1,86,321	140	1,226	29	599	830	3,716	22	552	86,018	4,53,969	87,039	4,59,963	115,179	6,90,459	1
20,305	1,49,859	46,332	4,34,907	577	1,991	883	4,227	27,659	1,54,661	2,311	11,997	34,227	1,59,614	65,656	3,31,200	172,955	5,31,245	2
10,956	66,477	11,750	73,439	199	129	339	396	529	495	165	136	16,984	28,182	18,115	29,338	89,336	4,17,091	3
79,153	9,67,524	104,408	13,56,107	1,835	15,636	138	1,053	25,520	1,96,638	6,951	49,585	191,345	6,60,718	225,589	9,24,030	339,761	11,47,069	4
45,363	4,68,976	99,153	12,54,132	341	3,019	262	3,418	11,964	69,128	6,021	48,308	8,114	58,570	27,635	1,83,508	204,055	19,76,206	5
89,446	6,29,172	107,127	7,26,076	355	1,165	2	4	1,493	8,757	332	1,011	826	3,411	3,013	14,348	105,640	4,98,319	6
3,295	23,528	14,843	1,18,508	1	4	...	...	136	1,636	...	...	...	...	137	1,640	36,376	1,78,968	6
10,580	1,28,541	45,693	7,28,181	10	24	...	...	1,020	15,151	6,468	37,990	92,713	5,70,252	100,235	6,23,397	106,050	6,78,099	9
1,150	10,735	6,963	45,617	...	...	...	...	442	1,408	...	...	14,905	34,631	15,347	36,034	62,040	3,25,511	10
5,578	45,033	6,661	52,749	...	...	...	...	95	1,406	...	...	509	1,013	604	2,419	16,204	70,004	11
25,548	91,419	30,501	1,39,969	...	...	...	665	16	18	2	2	756	753	774	1,668	111,961	4,44,879	12
812	4,057	812	4,057	...	...	...	...	26	43	...	...	1,061	727	1,087	770	4,321	12,909	13
4,733	23,906	8,895	46,224	27	232	64	277	...	...	...	...	4,122	6,431	4,213	6,940	5,709	9,050	14
44,926	4,24,149	46,632	4,46,697	...	...	...	...	202	562	...	...	...	...	202	562	20,620	2,12,426	15
...	...	40	12	...	...	...	...	...	...	...	...	...	...	...	...	2,410	336	16
...	...	665	5,063	...	...	...	...	...	...	...	...	...	...	...	...	727	2,961	17
5,239	24,299	7,781	52,667	...	...	...	...	...	...	...	...	...	...	...	...	10,757	9, 238	8
1,618	8,806	10,420	73,224	468	1,955	125	916	1,263	1,995	147	306	4,176	14,018	6,179	18,490	19,274	91,906	18
5,944	21,617	5,814	22,686	126	677	...	...	1,200	6,336	1,419	6,467	32	139	2,777	13,639	3,311	5,388	6
464	1,220	624	1,832	...	...	...	...	729	1,241	...	...	8	14	737	1,255	416	646	19
10,223	75,491	33,650	3,50,810	258	401	322	2,201	21,284	69,213	2,343	5,398	119,683	1,43,590	144,089	2,20,674	257,346	25,54,125	2
412	4,225	799	6,638	6	32	...	...	...	...	956	2,044	957	1,707	1,919	3,783	14,518	42,035	20
28,925	1,81,677	30,618	1,94,373	330	916	367	744	751	1,011	73	99	233	886	1,241	3,656	78,446	2,92,345	21
20,244	1,33,050	55,047	3,84,610	201	423	1,109	2,247	2,768	11,833	1,170	3,816	14,053	50,727	19,301	68,151	52,361	4,16,366	22
306	1,285	888	4,421	...	...	...	...	6	21	...	...	3	5	9	26	921	3,810	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
91	231	690	1,995	...	...	...	...	...	...	...	...	...	...	...	...	4,400	9,988	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	326	1,146	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27
4,911	35,791	5,007	37,421	...	...	...	...	...	...	...	...	...	...	...	...	767	8,055	30
30	90	37	100	...	...	...	...	...	...	...	...	8	7	8	7	447	1,092	1
20	18	28	24	...	...	...	...	...	...	...	...	...	1	...	1	383	186	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	216	383	30
...	...	20	35	...	...	...	...	...	...	...	...	...	...	...	...	122	155	32
...	...	23	149	...	...	...	...	...	...	47	246	...	...	47	246	11	64	33
1,920	29,362	1,970	30,379	...	...	...	...	...	...	...	...	...	...	...	...	1,097	16,814	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
435,111	35,43,689	701,681	67,91,436	4,977	26,825	3,638	17,068	97,458	5,45,374	29,251	1,06,238	590,723	21,89,215	725,946	29,44,720	1,738,046	1,07,23,782	
413,192	34,30,375	705,890	68,19,831	3,294	14,685	19,900	62,982	94,918	3,64,009	21,193	78,265	530,251	23,20,926	669,556	30,80,836	1,647,209	1,03,33,706	
11,319	1,12,294	...	...	1,683	12,140	...	...	2,540	...	8,058	27,973	60,472	...	56,390	...	90,837	4,91,076	
...	...	4,209	28,395	...	...	16,263	25,914	...	1,18,635	...	...	...	91,990	...	1,36,116	...	...	

APPEN

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Number. Main head.	Number. Sub-head.	Railway system, *vide* Appendix I.	XXV. Saltpetre and other saline substances. (1) Saltpetre. Quantity.	(1) Saltpetre. Earnings.	(2) Other saline substances. Quantity.	(2) Other saline substances. Earnings.	Total. Quantity.	Total. Earnings.	XXVI. Silk. (1) Raw. (a) Foreign. Quantity.	(1) Raw. (a) Foreign. Earnings.	(1) Raw. (b) Indian. Quantity.	(1) Raw. (b) Indian. Earnings.	(2) Piece-goods. (a) Foreign. Quantity.	(2) Piece-goods. (a) Foreign. Earnings.	(2) Piece-goods. (b) Indian. Quantity.	(2) Piece-goods. (b) Indian. Earnings.	Total. Quantity.	Total. Earnings.
		5′ 6″ gauge.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	(a),(b) & (c)	Bengal-Nagpur	...	...	...	...	...	...	...	...	583	9,665	...	...	...	...	583	9,665
2	(a),(c) to (f) & (n)&(o)	Bombay, Baroda and Central India.	1,609	14,344	1,367	17,070	2,976	31,414	304	7,782	67	1,471	61	1,961	66	2,018	498	13,232
3	...	Eastern Bengal State	41	235	4,226	13,641	4,267	13,876	...	...	148	1,474	...	...	...	...	148	1,474
4	...	East Indian	18,530	2,09,191	20,581	1,56,173	39,111	3,65,364	...	...	884	12,121	...	...	181	5,236	1,065	17,357
5	...	Great Indian Peninsula	650	6,864	3,801	47,369	4,469	54,233	194	2,587	96	6,281	31	2,484	7	377	318	11,729
6	(a)to(c)	Madras	321	3,289	148	2,671	469	5,960	...	...	502	9,395	2	10	6	37	510	9,442
8	(a)&(b)	Nizam's Guaranteed State.	119	795	981	6,669	1,100	7,464	...	1	1	8	1	7	1	43	3	59
9	...	North Western State	6,052	32,372	8,013	75,172	14,065	1,07,544	219	3,524	130	2,839	28	763	41	943	418	8,069
10	...	Oudh and Rohilkhand State.	735	2,727	195	866	930	3,593	...	...	...	...	...	...	1	13	1	13
		3′ 3½″ gauge.																
11	...	Assam-Bengal	4	18	...	2	4	20	...	...	22	242	...	...	...	5	22	247
12	...	Bengal and North-Western	11,351	42,357	6,140	20,061	17,491	68,318	...	...	9	91	...	...	3	64	12	155
13	...	Bengal-Dooars	...	...	117	247	117	247	...	...	...	...	...	...	...	...	...	...
14	...	Bhavnagar-Gondal-Junagad Porbandar.	66	283	10	44	76	326	5	33	5	10	...	...	...	...	10	43
15	...	Burma	4	65	37	592	41	657	63	1,998	2	67	6	223	2	46	73	2,333
16	...	Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	Dibru-Sadiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	(c)	Hyderabad-Godavari Valley.	51	448	177	1,335	228	1,783	4	85	1	32	...	...	1	32	6	149
18	...	Jodhpur-Bikaner	542	2,937	1,582	8,226	2,124	11,163	15	47	3	11	1	5	...	9	19	72
6	(d)to(f)	Madras	40	222	1	2	41	224	...	...	1	7	...	...	...	...	1	7
19	...	Morvi	14	24	...	...	14	24	...	...	...	...	...	...	...	...	...	...
2	(h)&(g) to (m)	Rajputana-Malwa	8,150	55,917	2,216	18,074	10,366	74,891	198	9,605	11	623	60	3,234	47	2,653	316	16,115
20	(a)&(b)	Rohilkund and Kumaon	120	295	893	2,271	1,013	2,566	...	...	...	...	...	...	...	...	...	...
21	...	South Indian	553	2,895	15	108	568	3,003	2	58	21	199	...	...	5	37	28	294
22	...	Southern Mahratta	270	2,406	240	1,861	510	4,267	178	3,246	247	1,492	...	...	...	...	425	4,740
23	...	Udaipur-Chitor	4	219	24	78	65	297	...	...	...	...	...	...	...	...	...	...
		2′ 6″ gauge.																
24	...	Baraset-Basirhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barsi Light	1	4	46	113	47	117	2	9	...	...	...	...	...	1	2	10
26	...	Bukhtiarpore-Behar Light.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	1	3	...	...	1	3	...	...	...	...	...	...	...	...	...	...
30	...	Kalka-Simla	...	7	6	135	6	142	...	1	...	...	...	1	1	19	1	21
1	(c)	Mourbhanj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	(d)	Parlakimedi Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	(e)	Powayan Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	...	Tarakeshwar-Magra	...	...	2	3	2	3	...	...	...	...	...	...	...	...	...	...
33	...	Tezpore-Balipara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2′ 0″ gauge.																
35	...	Darjeeling-Himalayan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakhala	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1905	49,274	3,27,816	50,823	3,79,683	100,097	7,57,499	1,174	28,978	2,732	46,028	190	8,697	362	11,520	4,458	95,213
		TOTAL 1904	57,592	4,29,805	47,025	3,50,721	104,617	7,80,526	1,421	35,653	2,266	38,779	209	9,740	479	16,973	4,366	1,00,045
		Increase	...	...	3,798	28,962	...	...	...	...	466	7,249	...	...	...	...	92	...
		Decrease	8,318	51,989	...	...	4,520	23,027	247	6,675	...	...	19	1,053	108	4,353	...	4,832

DIX 17—*continued.*

the earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

XXVII.														XXVIII.		Numbers.
Spices.																
(1) Betel-nuts.		(2) Cardamoms.		(3) Chillies.		(4) Ginger.		(5) Pepper.		(6) Others.		Total.		Stone and lime.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main head.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
9,205	65,860	...	...	7,534	31,016	...	...	...	...	6,712	40,359	23,451	1,96,235	74,860	1,99,721	1
1,169	22,507	119	2,166	2,328	23,782	1,279	14,364	825	15,445	9,401	1,00,267	15,131	1,78,551	50,801	1,48,181	2
15,538	1,13,742	367	6,237	6,212	41,819	1,120	16,701	240	3,891	2,926	15,566	26,343	1,97,956	31,115	41,413	3
11,659	2,51,153	486	13,665	11,849	2,12,517	1,233	14,426	1,106	28,601	11,459	1,84,991	37,704	7,05,743	349,187	12,50,914	4
9,543	2,04,745	97	3,914	10,595	1,09,005	584	13,970	713	22,968	12,319	1,61,074	33,851	5,06,739	122,671	3,69,239	5
10,964	1,26,523	40	531	19,823	1,39,539	912	6,175	5,614	39,343	3,084	21,661	41,037	3,33,762	98,439	1,73,974	6
850	9,689	15	199	4,688	38,493	53	492	49	583	1,781	12,724	7,435	62,179	19,474	56,138	8
701	6,966	311	4,851	6,321	67,063	1,835	18,216	899	24,380	3,321	34,060	13,387	1,55,535	274,660	4,20,636	9
2,370	37,287	25	328	1,667	16,379	409	4,322	96	997	2,182	9,360	6,859	68,673	76,842	1,02,065	10
1,670	14,605	...	...	1,714	9,079	4	25	7	50	160	1,366	3,555	25,125	2,557	6,429	11
3,033	24,257	224	2,198	6,309	33,847	1,374	13,172	531	5,643	1,771	13,177	13,242	92,294	34,653	59,403	12
181	851	30	398	30	80	63	157	9	45	6	25	319	1,556	382	1,315	13
589	2,949	6	54	384	2,488	14	92	6	64	945	3,547	1,943	9,174	75,661	63,088	14
5,396	58,925	1	19	5,928	1,05,402	1,043	9,964	22	460	199	1,716	12,590	1,76,425	114,344	2,03,855	15
27	7	1	1	10	3	...	...	15	4	...	...	53	15	...	...	16
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,986	3,501	17
589	6,695	2	47	1,236	13,922	26	253	8	97	351	3,406	2,211	24,410	1,195	5,863	8
124	822	10	81	696	5,226	36	343	31	274	222	1,004	1,121	7,669	31,198	50,406	18
1,061	3,309	2	10	2,280	7,962	9	34	301	867	49	151	4,302	12,333	730	1,454	6
9	33	...	...	46	166	2	8	...	1	124	524	181	732	498	603	19
997	14,430	76	3,406	5,149	53,897	672	17,905	530	17,832	12,203	1,17,902	19,627	2,25,368	52,653	1,98,080	2
228	1,998	19	115	525	3,813	106	484	31	235	386	1,566	1,295	8,211	8,151	12,115	20
14,737	72,863	311	2,672	9,205	37,539	666	3,067	763	6,095	259	2,317	25,400	1,74,352	193,909	1,85,550	21
11,328	89,761	194	3,009	14,826	1,03,155	308	3,266	439	3,798	8,797	58,193	35,952	2,61,182	45,340	89,584	22
8	59	...	3	47	198	19	126	3	25	96	300	163	711	81	301	23
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	24
448	1,343	...	...	99	264	7	25	9	25	271	657	834	2,313	48	141	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
12	34	...	...	38	109	...	...	...	...	15	43	65	186	1	3	27
5	114	1	17	3	69	28	339	1	49	13	209	51	557	572	7,072	30
8	32	...	...	...	1	...	...	...	...	8	20	16	53	57	46	1
4	3	...	...	12	11	...	...	...	...	31	19	47	33	5	5	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
2	5	...	...	...	...	...	...	...	...	...	...	2	5	13,056	4,451	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	139	33
50	1,176	184	2,918	1	32	1	22	17	420	14	290	267	4,859	1,060	10,043	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
101,505	11,32,847	2,461	46,919	119,637	11,47,915	11,953	1,37,947	12,266	1,72,000	70,693	7,95,544	327,514	34,33,212	1,675,163	36,02,189	
106,703	11,55,079	2,660	45,906	108,550	10,22,211	11,941	1,43,243	10,502	1,71,767	73,495	7,22,780	313,850	32,60,986	1,597,990	33,32,945	
...	...	...	1,043	11,087	1,25,704	11	...	1,764	273	6,188	72,764	13,664	1,72,256	107,182	3,29,094	
5,198	22,232	199	...	...	...	...	5,296	...	...	...	...	...	...	...	...	

APPEN

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed ov er all railways in India

Numbers.		Railway system, *vide* Appendix I.	XXIX. Sugar. (1) Refined or crystallised including sugarcandy.		(2) Unrefined. (a) Sugar.		(b) *Gur, rab* jaggery, molasses and other saccharine produce.		Total.		XXX. Tea. (1) Foreign.		(2) Indian.		Total.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.														
1	(a), (b) & (c).	Bengal-Nagpur	11,831	90,811	...	...	14,423	1,24,554	26,249	2,05,365	...	...	342	4,490	342	4,490
2	(a), (c) *to* (f) & (n) & (o).	Bombay, Baroda and Central India.	37,282	4,35,042	94	664	27,604	2,19,398	64,980	6,55,104	366	5,187	281	5,227	647	10,414
3	...	Eastern Bengal State	10,646	76,931	16,606	69,691	28,952	1,29,010	56,204	2,75,632	...	...	26,719	5,28,012	26,719	5,28,012
4	...	East Indian	23,475	2,23,726	64,075	3,71,786	130,794	5,81,360	217,344	11,76,872	...	...	1,597	30,089	1,597	30,089
5	...	Great Indian Peninsula	70,707	10,40,912	9,171	72,462	85,556	8,18,552	165,434	19,31,946	149	2,395	970	22,968	1,119	25,363
6	(a) *to* (c).	Madras	6,830	40,740	6,472	34,071	51,956	2,16,755	65,246	2,91,566	9	256	600	12,456	609	12,712
8	(a) & (b).	Nizam's Guaranteed State	2,989	23,154	701	5,993	4,084	29,092	7,774	58,239	22	302	69	1,217	91	1,519
9	...	North Western State	80,478	14,09,200	20,819	1,67,151	144,769	10,54,507	246,066	26,30,858	871	18,295	2,154	31,616	3,025	49,911
10	...	Oudh and Rohilkhand State	10,793	49,432	23,490	3,65,179	98,540	3,70,267	191,823	7,84,878	...	...	2,224	13,167	2,224	13,167
		3′ 3½″ gauge.														
11	...	Assam-Bengal	557	3,776	1,386	6,858	2,274	10,080	4,217	19,664	...	...	29,340	3,29,803	29,340	3,29,803
12	...	Bengal and North-Western	3,794	22,181	26,143	1,64,204	60,639	2,81,548	90,576	4,67,933	...	...	61	881	61	881
13	...	Bengal-Dooars	494	1,850	171	747	807	4,172	1,472	6,769	...	...	13,452	2,49,297	13,452	2,49,297
14	...	Bhavnagar-Gondal-Junagad Porbandar.	7,337	33,179	...	...	3,679	13,513	10,916	46,691	2	14	71	524	73	538
15	...	Burma	140	1,522	4,801	53,957	13,331	1,12,625	18,272	1,68,104	1,255	22,046	65	1,227	1,320	23,273
16	...	Deoghur	...	...	259	77	500	141	759	218	...	...	...	...	...	...
17	...	Dibru-Sadiya	488	3,312	...	...	...	...	488	3,312	...	...	9,597	75,461	9,597	75,461
8	(a)	Hyderabad-Godavari Valley	2,534	22,388	38	377	943	8,119	3,515	30,884	5	66	2	49	7	117
18	...	Jodhpur-Bikaner	3,091	20,715	5,375	26,199	9,093	62,553	18,159	1,09,467	3	40	2	33	5	73
6	(d) *to* (f).	Madras	1,131	4,245	118	734	1,403	3,296	2,657	8,275	1	2	222	1,110	223	1,112
19	...	Morvi	155	492	67	170	1,270	3,091	1,492	3,753	...	...	...	18	4	18
2	(b) & (g) *to* (m).	Rajputana-Malwa	24,735	2,47,906	46,491	3,76,983	87,278	10,74,213	158,504	16,99,102	367	9,065	148	2,215	515	11,280
20	(a) & (b).	Rohilkund and Kumaon	917	3,378	7,074	18,068	23,983	87,071	31,974	1,08,537	...	...	155	1,134	155	1,134
21	...	South Indian	17,043	66,335	4,620	25,734	37,536	2,27,955	59,199	3,20,024	...	3	4,006	25,431	4,006	25,434
22	...	Southern Mahratta	9,822	62,243	5,792	41,930	56,986	3,39,771	72,500	4,43,944	22	408	59	1,093	81	1,501
23	...	Udaipur-Chitor	317	1,803	800	3,718	731	3,140	1,848	8,661	...	2	...	5	...	7
		2′ 6″ gauge.														
24	...	Baraset-Basirhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	Barsi-Light	564	1,346	8	22	409	988	981	2,256	1	3	...	...	1	3
26	...	Bukhtiarpore-Behar Light	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	Cutch	103	299	96	276	...	...	204	575	1	3	...	...	1	3
30	...	Kalka-Simla	242	3,784	219	3,075	502	7,635	1,053	14,494	5	90	43	850	48	940
1	(c)	Mourbhanj	11	31	...	...	3	9	14	40	...	...	...	...	...	...
1	(d)	Parlakimedi Light	88	51	...	...	6	4	94	55	...	...	...	...	...	...
20	(c)	Powayan Light	...	...	1,102	1,307	...	...	1,102	1,307	...	...	...	...	...	...
32	...	Tarakeshwar-Magra	...	...	63	105	142	165	225	270	...	...	...	...	...	...
33	...	Tespore-Balipara	2	10	...	...	...	...	2	10	...	...	4,079	29,042	4,079	29,042
		2′ 0″ gauge.														
35	...	Darjeeling-Himalayan	61	1,230	693	12,029	218	3,029	972	16,288	...	...	4,066	56,864	4,066	56,864
36	...	Howrah-Amta	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	...	Howrah-Sheakala	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	...	Jorhat	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL 1905	327,541	38,82,023	335,755	18,23,607	889,011	57,85,463	1,552,307	1,14,91,093	3,079	58,779	99,328	14,43,868	102,407	15,02,647
		TOTAL 1904	329,501	41,20,962	273,033	17,24,760	845,956	56,69,453	1,448,590	1,15,14,275	3,250	66,056	119,850	15,07,124	123,100	15,73,180
		INCREASE	...	...	62,722	98,847	43,055	1,16,010	75,727	...	...	...	...	...	...	...
		DECREASE	1,960	2,38,939	...	...	...	...	...	23,182	171	7,279	20,522	63,256	19,693	20,535

DIX 17—*continued.*

the earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

XXXI. Tobacco.								XXXII. Wood.						XXXIII—(continued on following page). Wool.						Remarks.
(1) Unmanufactured.		(2) Manufactured. (a) Cigars.		(b) Other sorts.		Total.		(1) Timber, unwrought.		(2) Manufactured.		Total.		(1) Raw.		(2) Manufactured. (a) Carpets and rugs.		(b) Piece-goods, European.		(c) Piece-goods, Indian.		
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Main heads.
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
9,362	83,285	...	...	787	13,378	10,149	96,663	56,427	2,34,525	2,457	18,395	58,884	2,52,920	...	...	...	...	...	...	...	...	1
14,039	1,15,385	455	5,151	563	6,045	15,041	1,26,581	37,215	2,14,563	4,428	48,365	41,643	2,62,928	7,065	1,36,317	222	4,295	309	7,857	469	9,169	2
34,436	3,28,637	...	...	702	11,389	35,138	3,40,026	38,962	85,074	3,414	18,532	42,376	1,04,506	1,425	25,295	...	...	...	...	95	1,309	3
32,068	3,54,555	55	1,221	2,915	76,310	35,033	4,32,086	61,315	2,42,250	7,968	89,849	69,283	3,32,099	1,684	20,094	607	17,416	820	14,094	349	9,539	4
10,116	1,23,658	1,021	34,248	409	8,994	11,546	1,66,898	165,761	5,84,793	9,124	1,56,893	174,875	7,40,686	799	13,515	83	3,189	268	11,862	167	4,597	5
22,052	1,36,330	701	12,711	1,471	19,779	24,224	1,68,820	210,094	6,40,669	4,935	42,397	215,029	6,83,066	2,283	20,928	617	5,798	147	5,304	741	8,833	6
1,422	19,901	116	1,934	16	247	1,554	22,072	20,916	75,563	607	7,312	21,523	82,875	304	2,905	96	1,180	20	321	261	3,183	8
16,691	1,76,053	98	2,263	2,267	53,513	19,056	2,30,829	72,963	2,70,191	10,131	1,03,717	83,094	3,73,911	18,876	4,69,892	226	4,426	1,999	21,390	1,103	23,884	9
8,363	45,961	62	859	250	2,073	8,665	48,792	108,790	1,93,157	6,258	33,415	115,028	2,26,572	330	2,580	19	118	195	1,199	321	3,628	10
1,932	14,069	15	267	141	1,287	2,088	15,623	707	3,322	1,651	13,677	2,358	17,099	...	2	13	235	...	1	2	38	11
35,103	2,93,497	51	939	273	2,449	35,427	2,96,885	31,403	93,678	4,161	35,982	35,584	1,29,660	109	1,647	64	608	84	983	332	3,144	12
2,827	6,124	...	...	33	392	2,860	6,516	2,388	11,122	25	295	2,413	11,417	...	...	...	...	...	...	...	...	13
1,008	5,923	4	33	301	2,046	1,313	8,002	11,027	51,349	691	4,666	11,718	56,015	748	5,412	...	...	2	11	12	70	14
4,852	39,163	160	2,169	707	7,657	5,439	48,938	131,769	560,293	2,677	18,407	134,446	5,78,700	31	522	95	2,128	8	194	...	4	15
200	63	50	14	...	...	250	77	30	10	...	...	30	10	...	...	...	...	...	...	...	...	16
...	...	...	...	...	...	...	...	3,326	16,254	...	...	3,326	16,254	...	...	...	...	...	...	...	...	17
883	6,612	3	60	26	474	412	7,146	7,998	36,706	1,144	10,741	9,142	47,447	7	126	38	768	2	29	95	1,159	8
1,329	9,267	21	264	120	898	1,450	10,429	1,559	3,750	495	2,995	2,054	11,745	4,299	44,422	7	110	4	61	25	225	18
1,821	6,206	34	279	14	121	1,869	6,606	22,871	35,218	1,192	1,562	24,063	36,780	2	31	4	24	2	12	11	65	6
488	1,435	1	11	25	134	514	1,580	1,094	3,314	60	269	1,144	3,583	256	1,523	...	4	...	...	2	6	19
12,944	1,46,311	169	4,629	769	6,075	13,875	1,57,515	17,558	69,352	3,124	26,087	20,682	95,439	10,361	1,53,782	152	5,059	441	14,191	718	18,009	2
1,796	8,903	16	170	213	1,959	2,024	10,632	24,017	73,331	1,140	5,971	25,166	79,302	237	1,207	5	38	5	30	11	106	20
6,505	34,754	1,875	18,007	1,739	6,397	9,758	59,158	111,327	1,77,802	6,185	44,902	118,012	2,22,704	223	2,158	121	1,739	4	27	164	3,157	21
12,285	74,213	256	5,582	189	2,758	12,730	82,553	44,398	1,06,709	5,769	34,019	50,167	2,30,728	660	9,542	...	6	1	37	41	895	22
374	1,746	1	2	12	89	387	1,837	28	197	12	97	40	294	73	514	...	2	...	...	...	7	23
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
46	126	4	13	10	45	60	184	147	301	179	460	326	761	1	2	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26
10	30	...	...	...	...	10	30	40	140	...	...	40	140	17	49	...	...	...	...	...	...	27
68	1,291	22	805	31	723	121	2,819	650	8,318	345	5,592	998	13,910	1	21	39	547	20	515	65	1,508	30
5	13	...	...	1	3	6	16	81	264	9	23	90	287	...	...	...	...	...	...	...	...	1
16	9	...	...	2	3	18	12	24	12	16	39	40	51	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	528	1,074	...	...	528	1,074	...	...	...	...	...	...	...	...	20
53	77	...	...	...	...	53	77	35	43	1	2	36	45	1	3	...	...	...	...	...	...	32
1	2	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
38	790	161	4,504	76	1,450	275	6,744	532	4,920	197	3,263	729	8,183	13	276	5	135	6	191	12	327	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
222,317	20,33,207	5,005	95,724	14,059	2,26,957	251,381	23,55,888	1,066,439	38,93,587	78,407	7,27,624	1,144,876	46,21,211	49,610	9,10,763	2,403	47,925	3,428	78,270	4,963	92,581	
225,768	18,91,718	5,239	98,000	16,851	2,19,065	247,859	21,98,783	1,138,825	38,81,322	72,329	5,64,953	1,211,354	44,46,274	49,701	9,96,576	2,192	44,482	2,469	66,312	4,949	1,04,776	
6,549	1,51,489	...	...	...	7,892	2,833	1,57,105	...	12,265	5,878	1,62,672	...	1,74,937	...	...	211	3,343	959	11,958	33	...	
...	...	294	2,276	2,792	...	...	...	52,356	...	...	...	46,478	...	91	85,811	...	...	...	...	...	13,195	

APPEN

Principal commodities carried by railways and

[The total quantity of each commodity represents the total weight conveyed over all railways in India

Number.		Railway system, *vide* Appendix I.	XXXIII. Wool—*concluded.* (2) Manufactured—*concluded.* (d) Other sorts of manufactures.		Total.		XXXIV. All other articles of merchandise.		Grand Total.	
Main head.	Sub-head.		Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.
			Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
		5′ 6″ gauge.								
1	(*a*), (*b*) & (*e*)	Bengal-Nagpur	...	...	...	...	121,519	6,20,099	3,213,708	1,46,38,109
2	(*a*), (*c*) to (*f*) & (*m*) & (*o*).	Bombay, Baroda and Central India	63	1,346	8,209	1,59,004	322,516	13,24,400	1,833,819	1,22,64,118
3	...	Eastern Bengal State	2	7	1,522	26,611	101,025	6,00,636	2,423,299	1,08,91,460
4	...	East Indian	961	23,284	4,321	84,426	533,819	34,43,099	10,276,066	4,97,63,820
5	...	Great Indian Peninsula	1,179	23,825	2,496	56,088	261,096	26,10,716	3,821,792	4,24,76,268
6	(*a*) to (*c*)	Madras	179	2,195	3,972	42,858	112,934	9,29,539	2,316,510	1,20,87,934
8	(*a*) & (*b*)	Nizam's Guaranteed State	...	1	671	7,690	16,618	1,35,064	726,872	32,26,926
9	...	North Western State	1,203	22,006	22,498	5,41,593	387,179	32,53,131	4,156,855	3,80,11,775
10	...	Oudh and Rohilkhand State	...	...	775	7,416	233,220	8,86,139	1,498,545	62,83,164
		3′ 3½″ gauge.								
11	...	Assam-Bengal	18	117	33	393	15,403	1,03,572	305,144	15,02,448
12	...	Bengal and North-Western	3	12	592	6,394	76,443	2,77,333	1,401,055	57,79,593
13	...	Bengal-Dooars	...	...	...	...	6,909	53,378	74,910	5,25,676
14	...	Bhavnagar-Gondal-Junagad-Porbandar	2	13	764	5,506	9,705	52,740	269,948	8,18,305
15	...	Burma	...	...	134	2,846	198,289	7,15,348	1,488,671	76,75,550
16	...	Deoghur	...	...	...	...	6,454	2,039	14,323	4,114
17	...	Dibru-Sadiya	...	...	...	...	34,386	63,032	631,490	7,95,117
8	(*c*)	Hyderabad-Godavari Valley	...	...	142	2,082	2,931	33,829	238,336	18,37,855
18	...	Jodhpur-Bikaner	311	2,883	4,646	47,701	21,682	1,03,813	418,264	19,65,936
6	(*d*) to (*f*)	Madras	1	8	20	149	5,672	41,928	97,058	2,97,624
19	...	Morvi	5	36	263	1,569	1,321	6,236	22,119	63,119
2	(*b*) & (*g*) to (*m*)	Rajputana-Malwa	112	2,336	11,679	1,92,347	273,312	14,79,964	2,195,573	1,87,60,442
20	(*a*) & (*b*)	Rohilkund and Kumaon	115	633	373	2,014	89,630	1,80,407	343,054	9,63,079
21	...	South Indian	61	692	573	7,773	113,986	6,03,289	1,437,503	58,32,469
22	...	Southern Mahratta	790	8,189	1,492	17,669	100,399	3,54,632	1,123,198	64,32,318
23	...	Udaipur-Chitor	1	4	74	527	991	5,671	15,611	71,310
		2′ 6″ gauge.								
24	...	Baraset-Basirhat	...	...	...	...	2,203	2,732	2,203	2,732
25	...	Barsi Light	5	16	6	18	801	1,952	78,867	1,77,270
26	...	Bukhtiarpore-Behar Light	...	...	...	...	19,284	25,661	19,284	25,661
27	...	Cutch	...	...	17	49	2,331	7,663	6,549	21,704
30	...	Kalka-Simla	9	105	134	2,696	3,229	45,958	24,240	2,89,010
1	(*c*)	Mourbhanj	...	...	...	...	434	1,274	2,688	7,460
1	(*d*)	Parlakimedi Light	...	...	...	...	298	210	10,179	8,320
20	(*c*)	Powayan Light	...	...	...	...	20,374	30,443	28,672	43,256
32	...	Tarakeshwar-Magra	...	...	41	3	597	1,167	20,937	13,606
33	...	Tezpore-Balipara	...	...	...	...	6,344	14,457	14,178	55,018
		2′ 0″ gauge.								
35	...	Darjeeling-Himalayan	3	79	39	1,008	5,689	56,623	38,237	5,10,948
36	...	Howrah-Amta	...	...	...	...	17,507	27,897	17,507	27,897
3	...	Howrah-Sheakhala	...	...	...	...	6,369	8,524	6,369	8,524
38	...	Jorhat	...	...	...	...	10,158	47,845	10,158	47,845
		Total 1905	5,023	87,780	65,446	12,17,223	3,144,057	1,61,30,495	40,728,491	24,42,06,779
		Total 1904	5,914	1,13,152	66,225	13,25,298	3,149,569	1,61,84,116	38,907,413	23,69,80,494
		Increase	...	...	221	...	...	19,46,379	1,821,078	81,26,285
		Decrease	891	25,365	...	1,08,070	5,512	...	...	...

DIX 17—*concluded.*

the earnings therefrom during the calendar year 1905.

and is therefore not the same as the total production.]

ANIMALS.										NUMBER.	REMARKS.
(1) HORSES.		(2) CATTLE.		(3) SHEEP, ETC.		(4) ELEPHANTS.		TOTAL.		Main head.	
Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.	Quantity.	Earnings.		
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.		
94	5,764	7,114	32,421	3,832	86,096	1	113	11,041	74,394	1	
346	11,118	9,556	1,79,703	12,713	2,35,806	...	...	22,614	4,26,627	2	
63	1,688	235	2,154	393	2,059	...	...	691	5,901	3	
1,298	75,431	2,996	78,642	4,735	1,24,212	...	39	9,029	2,78,324	4	
1,293	91,563	10,825	80,658	11,237	1,83,889	...	...	23,355	3,65,110	5	
...	...	...	...	...	...	...	...	...	...	6	
250	7,392	55	894	25	367	2	61	332	8,714	8	
3,931	99,999	3,202	41,839	523	14,099	...	...	7,655	1,55,936	9	
1,128	48,660	502	6,293	31	1,426	...	...	1,661	56,379	10	
5	237	43	453	98	971	...	...	145	1,661	11	
82	5,804	543	3,289	135	2,378	...	...	760	11,471	12	* Excluding Rs. 4,43,221 in respect of ferries and steam-boats which are included in the details.
...	...	...	...	...	...	...	...	...	...	13	
10	164	79	1,115	11	113	...	...	100	1,392	14	
806	28,146	4,905	1,42,431	1,693	43,658	5	2,807	7,409	2,17,042	15	
...	...	...	...	...	...	...	...	...	...	16	
...	...	135	679	...	...	...	...	135	679	17	
47	1,980	13	518	12	198	...	...	71	2,696	18	
84	1,552	72	930	1	22	...	...	157	2,504	18	
...	...	...	...	...	...	...	...	...	...	6	
9	115	12	165	1	19	...	...	21	299	19	
383	11,261	2,553	44,315	4,595	63,893	...	...	7,531	1,19,469	3	
10	17	11	307	...	...	...	...	21	324	20	
11	259	1,147	7,648	3,856	33,123	...	...	5,014	41,030	21	
184	5,071	183	4,448	619	5,995	24	410	1,010	15,924	22	
10	99	4	41	...	...	...	...	14	140	23	
...	...	...	...	...	...	...	...	...	...	24	
...	...	...	...	...	...	...	...	...	...	25	
...	...	...	...	...	...	...	...	...	...	26	
...	...	...	...	...	...	...	...	...	...	27	
1	88	10	500	...	...	...	...	11	588	30	
...	...	...	...	...	...	...	...	...	...	1	
...	...	...	...	...	...	...	...	...	...	1	
...	...	...	...	...	...	...	...	...	...	20	
...	...	...	...	...	...	...	...	...	...	32	
...	...	...	...	...	...	...	...	...	...	33	
...	...	...	128	...	...	...	...	...	128	35	
...	...	...	...	...	...	...	...	...	...	36	
...	...	...	...	...	...	...	...	...	...	37	
...	...	...	...	...	...	...	...	...	...	38	
10,044	3,96,407	44,193	6,38,571	44,508	7,48,323	32	3,430	98,777	17,86,731		
9,889	3,85,834	34,598	6,73,939	40,245	6,92,731	3	434	84,735	17,52,938		
155	10,573	9,595	...	4,263	55,592	29	3,996	14,042	33,793		
...	...	...	35,368	...	...	...	...	...	...		

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											5′ 3″
		Number.		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)		6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905.	Bengal Central	Bengal-Nagpur	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula. G.I.P.	Great Indian Peninsula. L.M.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	DESCRIPTION OF RAILWAY WORKED.													
1	Gauge of railway	...	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	5′ 6″	3′ 3½″
2	Mileage worked . . *Miles*	...	141·57	1,693·57	832·87	370·42	2,270·23	1,676·95	1,179·13	1,408·12	354·70	3,868·05	1,195·28	740·38
3	Number of stations . . *No.*	...	28	233	132	129	378	260	143	304	45	578	182	106
4	Total length of the following gradients :—													
	(*a*) $\frac{1}{50}$ and less . . *Miles*	...	...	...	...	...	5·90	19·31	6·75	...	...	71·12	0·19	10·10
	(*b*) $\frac{1}{51}$ to $\frac{1}{75}$ . . „	...	...	0·15	1·32	...	16·78	2·82		22·34	...	84·97	9·30	33·03
	(*c*) $\frac{1}{51}$ to $\frac{1}{100}$ . . „	...	...	103·90	0·50	...	40·27	61·90	11·23	52·80	79·19	123·48	6·41	25·70
	(*d*) $\frac{1}{101}$ to $\frac{1}{200}$ . . „	...	...	570·81	168·75	...	150·25	549·90	362·91	289·69	110·99	99·85	19·15	89·99
	(*e*) $\frac{1}{201}$ to $\frac{1}{300}$ . . „	...	...	141·78	63·31	5·97	131·88	210·95	104·61	155·58	18·22	97·44	22·56	30·98
5	Steepest gradient worked—													
	(*a*) Length . . *Miles*	...	...	0·15	1·32	2·00	13·34	5·99	2·40	0·80	2·52	13·65	0·19	8·54
	(*b*) Inclination	...	$\frac{1}{200}$	$\frac{1}{75}$	$\frac{1}{80}$	$\frac{1}{300}$	$\frac{1}{80}$	$\frac{1}{37}$	$\frac{1}{80}$	$\frac{1}{80}$	$\frac{1}{100}$	$\frac{1}{150}$	$\frac{1}{80}$	$\frac{1}{37}$
	FINANCIAL RESULTS.	Calendar year 1905 by half-years.												
6	Percentage of net earnings (including steam-boat traffic) for each half-year on capital outlay . *Per cent.*	1st half	1·20	2·96	4·48	1·81	4·99	5·14	1·96	2·14	3·40	2·55	2·26	—0·15
		2nd „	...	2·25	3·90	3·44	4·52	3·18	1·65	1·96	3·15	2·45	1·95	0·30
7	Percentage of net earnings for each half-year on paid up capital . . . . *Per cent.*	1st half	1·23	2·95	3·80	...	...	...	1·98	2·16	2·91	...	...	...
		2nd „	...	2·25	2·89	...	...	...	1·67	1·95	2·70	...	...	...
	OUTLAY, EARNINGS AND EXPENSES.													
	(*Exclusive of Steam-boat Service*)													
8	Capital outlay per mile open . *Rs.*	1st half	1,03,192	1,42,619	1,89,705	2,84,961	2,28,153	2,01,432	1,39,805	1,40,521	1,29,607	1,45,592	1,19,027	1,58,505
		2nd „	...	1,46,720	1,89,998	2,22,197	2,29,409	2,02,688	1,40,046	1,39,427	1,29,757	1,43,472	1,20,254	1,59,488
9	Total earnings per mile open per week . . . . „	1st half	181	293	555	578	680		472	289	257	338	250	78
		2nd „	...	244	469	635	636		374	280	245	298	229	93
10	Total working expenses per mile open per week . . „	1st half	138	124	222	367	237		208	167	85	164	144	87
		2nd „	...	111	213	316	233		201	167	85	155	137	80
11	Total earnings per train-mile . „	1st half	3·38	4·56	6·67	4·18	4·92		4·44	4·08	4·97	3·83	3·31	2·20
		2nd „	...	3·99	5·93	4·81	4·64		3·84	3·98	4·54	3·52	3·00	2·51
12	Total working expenses per train-mile . . . . „	1st half	2·58	1·93	2·66	2·66	1·71		1·96	2·36	1·64	1·86	1·90	2·43
		2nd „	...	1·81	2·75	2·39	1·70		2·06	2·37	1·59	1·83	1·80	2·04
13	Net earnings per train-mile . „	1st half	0·80	2·63	4·01	1·52	3·21		2·48	1·72	3·33	1·97	1·41	—0·23
		2nd „	...	2·18	3·18	2·42	2·94		1·78	1·61	2·95	1·69	1·21	0·47
14	Cost per 1,000 gross ton miles moved (freight and dead weight) . . . . „	1st half	11·69	4·76	6·41	7·38	3·36		5·54	6·61	3·92	5·05	5·37	14·07
		2nd „	...	5·03	7·17	6·53	3·50		6·20	6·75	4·01	5·25	5·22	9·55
15	Percentage of total working expenses on total earnings. *Per cent*	1st half	76·20	42·27	39·89	63·57	34·80		44·15	57·85	33·08	48·51	57·51	110·58
		2nd „	...	45·47	46·38	49·76	36·64		53·66	59·51	34·92	51·98	59·77	81·22
16	Percentage of total working expenses on total earnings, excluding from both sides of the account the charges for carriage of revenue stores . *Per cent.*	1st half	75·79	41·06	39·27	63·97	33·32		42·69	56·65	32·62	46·34	55·42	111·23
		2nd „	...	43·61	45·76	149·53	34·91		52·31	58·35	34·64	48·86	58·57	80·68
	(*Inclusive of Steam-boat Service*).													
17	Percentage of total working expenses on total earnings (for details, see items 123—129). *Per cent*	1st half	76·20	42·78	39·89	63·57	34·95		44·15	57·85	33·08	48·50	57·51	111·41
		2nd „	...	46·65	46·38	49·76	36·96		53·66	59·51	34·92	51·98	59·77	81·28

DIX 18.

(by systems) during each half-year of 1905.

do not prepare these statistics.

3′ 3⅜″											2′ 6″				Gauge.	Serial number.
12 (a) & (b)	14 (a) to (d)	15 (a)	3 (b) & (c)	8 (c)	18 (a) to (c)	11 (b)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23 (a)	1 (b)	30 (a)	9 (g) & (h)	1 (e)	Number.	
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal)	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Maharatta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai	Raipur-Dhamtari.	Calendar year 1905.	
3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	3′ 3⅜″	2′ 6″	2′ 6″	2′ 6″	2′ 6″	...	1
1,547·19	455·45	1,340·15	766·24	391·13	832·63	34·90	2,050·63	281·21	1,353·47	1,695·44	68·72	223·75	59·41	131·98	56·24	...	2
276	64	230	138	47	85	11	291	47	236	243	7	27	20	21	8	...	3
...	1·83	64·52	0·37	...	...	...	3·40	...	0·04	15·06	...	...	6·00	0·96	...	...	4
...	0·28	31·83	0·64	...	...	...	0·23	6·41	14·64	73·42	...	28·81	2·38	...	...	...	
0·17	1·68	47·73	2·05	...	...	...	18·75	8·56	130·82	549·73	1·10	58·53	9·94	43·55	...	...	
2·27	123·76	155·52	21·20	221·73	168·36	7·45	360·44	4·40	243·71	265·66	30·75	37·29	3·40	36·24	18·60	...	
2·16	64·74	107·78	15·08	13·95	61·24	0·67	173·72	6·83	108;56	98·39	6·98	13·89	...	22·74	1·95	...	
0·17	1·85	9·81	0·82	5·41	2 31	0·58	3·49	3·00	0·04	15·06	0·46	0·07	27·61	9·43	2·41	...	5
1/600	1/50	1/12	1/130	1/23	1/250	1/600	1/75	1/70	1/50	1/40	1/100	1/13	1/13	1/23	1/43	...	
																Calendar year 1905 by half-years.	
3·41	3·18	8·01	1·95	3·55	4·52	...	5·61	3·97	3·27	1·75	2·48	0·65	0·77	—0·58	2·44	1st half	6
2·57	1·89	1·57	3·98	1·47	4·97	—0·03	4·70	3·95	3·41	1·89	2·52	0·54	1·52	—0·71	0·89	2nd „	
...	...	...	...	3·48	...	...	...	...	...	...	...	0·57	0·78	...	2·44	1st half	7
...	...	...	...	1·46	...	...	...	...	...	...	...	0·51	1·54	...	0·89	2nd „	
76,882	49,830	97,126	93,470	66,866	25,509	...	73,146	47,353	77,212	79,426	30,720	43,225	2,79,202	64,268	24,823	1st half	8
78,011	49,823	97,727	91,333	67,001	25,520	60,905	73,033	47,829	77,874	84,510	30,720	51,381	2,87,515	65,050	24,823	2nd „	
166	105	252	178	179	78	39	284	133	201	137	56	38	214	44	44	1st half	9
144	83	199	226	113	85	36	253	130	200	123	63	47	273	53	30	2nd „	
62	44	135	104	87	33	37	115	60	102	81	27	28	128	64	20	1st half	10
62	47	137	91	74	36	37	116	74	95	77	33	36	99	69	21	2nd „	
2·87	4·27	3·62	3·14	3·38	3·22	1·52	3·81	3·01	3·20	2·80	3·78	2·07	3·91	1·12	2·08	1st half	11
2·59	3·61	2·94	3·77	2·83	3·34	1·38	3·70	3·13	2·92	2·51	3·98	2·25	5·80	0·99	1·39	2nd „	
1·08	1·81	1·93	1·84	1·64	1·37	1·41	1·54	1·35	1·62	1·65	1·81	1·49	2·34	1·64	0·97	1st half	12
1·12	2·05	2·02	1·52	1·86	1·41	1·41	1·69	1·79	1·38	1·57	2·08	1·74	1·93	1·29	1·00	2nd „	
1·79	2·46	1·69	1·30	1·74	1·35	0·11	2·27	1·67	1·58	1·15	1·98	0·58	1·56	—0·52	1·11	1st half	13
1·47	1·56	0·92	2·25	0·97	1·93	—0·03	2·01	1·34	1·54	0·94	1·89	0·51	3·37	—0·30	0·89	2nd „	
4·67	9·28	8·66	9·42	7·64	6·26	11·70	6·15	7·27	8·50	8·54	9·82	8·26	32·63	22·29	10·07	1st half	14
5·06	11·35	9·53	6·72	9·44	6·58	11·73	7·23	9·45	7·29	8·44	10·39	9·42	21·96	21·51	13·36	2nd „	
37·53	42·36	53·43	53·56	48·45	42·39	93·30	40·33	4·77	50·61	58·99	47·77	72·04	59·97	146·91	46·69	1st half	15
43·12	56·64	68·62	40·36	65·79	42·25	102·17	45·73	57·29	47·37	63·54	52·37	77·43	36·35	130·53	71·64	2nd „	
36·19	42·20	52·25	55·57	46·79	41·70	93·30	39·06	44·18	50·02	57·75	47·75	68·63	59·56	147·94	43·92	1st half	16
42·00	56·32	67·19	39·49	63·79	41 36	102·17	44·62	56·91	46·78	61·07	52·25	74·12	36·17	131·05	67·97	2nd „	
39·62	42·36	54·09	61·27	48·45	42·39	93·30	40·33	44·30	50·61	58·99	47·77	72·04	59·97	150·29	46·69	1st half	17
46·16	56·64	69·35	42·04	65·79	42·25	102·17	45·73	42·62	47·37	62·54	52·37	77·43	36·35	134·10	71·64	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.												
18	Total working expenses for both coaching and goods traffic excluding steam-boat expenses, and after deducting telegraph and sundry receipts (in thousands of Rs.) . . *Rs.*	1st half	4,11	52,14	45,74	23,92	1,34,10	1,51,02	58,38	7,17	1,57,44	41,74	16,00
		2nd „	...	46,08	44,66	35,78	1,32,48	1,46,69	58,43	7,13	1,54,03	39,35	14,26
	Proportions, *dividing expenditure in ratio of gross ton-mileage (freight and dead load)*—												
19	Coaching in thousands of Rs. . „	1st half	2,62	12,78	17,68	11,40	33,44	46,04	17,55	1,70	43,28	18,99	7,14
		2nd „	...	13,41	19,95	13,92	37,88	56,00	17,89	1,76	49,01	19,27	4,74
20	Goods in thousands of Rs. . „	1st half	1,49	39,36	28,06	12,52	1,00,66	1,04,98	40,83	5,47	1,14,16	22,75	8,86
		2nd „	...	32,67	24,71	21,86	94,59	90,69	40,54	5,37	1,05,02	20,08	9,52
	COACHING TRAFFIC.												
	Gross receipts and train-mileage (in thousands)—												
21	Receipts from coaching traffic *Rs.*	1st half	4,22	36,65	37,84	18,60	1,16,96	84,90	38,51	5,29	96,16	35,79	7,94
		2nd „	...	37,62	36,79	23,41	1,22,32	91,37	35,97	5,56	1,03,82	36,22	6,94
22	Coaching train-miles run . *No.*	1st half	127	1,025	1,090	619	3,376	3,437	1,057	142	3,784	1,448	272
		2nd „	...	1,119	1,123	884	3,613	3,665	1,076	144	4,141	1,552	280
23	Average coaching *receipts* per train-mile . . . . *Rs.*	1st half	3·33	3·57	3·47	3·00	3·46	2·46	3·64	3·73	2·54	2·47	2·91
		2nd „	...	3·36	3·28	2·65	3·39	2·49	3·34	3·86	2·51	2·33	2·48
	UNITS AND UNIT-MILEAGE.												
	Number of units carried one mile (in thousands)—												
24	1st class . . . *Unit-miles*	1st half	54	1,392	2,143	1,079	5,107	6,657	2,421	292	4,067	1,886	246
		2nd „	...	1,348	1,867	1,022	5,028	9,353	2,237	289	4,906	1,823	244
25	2nd „ . . . . „	1st half	269	3,134	14,193	2,224	12,178	28,916	7,924	2,316	12,770	4,791	466
		2nd „	...	3,231	12,080	3,015	12,410	31,417	9,674	2,183	15,386	5,638	443
26	3rd or intermediate class „	1st half	1,242	7,709	16,980	12,744	51,118	55,801	2,483	4,401	44,146	21,450	412
		2nd „	...	9,008	17,488	14,987	54,125	62,041	2,186	4,478	49,653	21,969	383
27	4th or lowest „ „	1st half	22,435	241,053	224,022	103,241	720,994	449,198	246,535	29,282	617,345	206,582	43,679
		2nd „	...	241,457	209,141	131,431	764,710	470,312	235,187	31,018	650,933	205,683	37,966
28	Total passenger unit-mileage „	1st half	24,000	253,288	257,338	119,288	789,397	540,572	259,363	36,291	678,328	234,659	44,803
		2nd „	...	255,744	240,596	150,455	837,073	573,123	249,284	37,968	720,828	225,113	39,036
29	Other coaching traffic . *Ton-miles*	1st half	158	1,394	3,155	751	9,780	8,670	3,176	498	5,970	1,660	341
		2nd „	...	1,919	3,295	873	9,352	8,572	2,318	495	7,035	1,835	315
	Average sum received for carrying a unit one mile—												
30	1st class . . . . *Pies*	1st half	14·30	14·61	9·98	13·63	14·76	11·60	12·48	15·80	11·66	11·81	16·18
		2nd „	...	13·19	10·28	13·59	14·89	10·83	12·41	15·51	11·26	11·90	15·92
31	2nd „ . . . . . „	1st half	7·44	6·81	4·55	6·76	6·51	4·33	5·04	4·68	4·75	5·39	7·87
		2nd „	...	6·25	4·99	6·31	6·96	4·56	4·17	4·63	4·80	5·47	7·79
32	3rd or intermediate class . „	1st half	3·53	3·39	2·99	3·00	3·26	2·29	4·50	2·50	3·02	3·03	4·06
		2nd „	...	3·21	3·00	2·95	3·27	2·37	4·50	2·50	3·01	3·03	4·05
33	4th or lowest „ . „	1st half	3·00	2·41	2·23	2·46	2·24	2·15	2·25	1·99	2·26	2·45	2·94
		2nd „	...	2·39	2·31	2·50	2·22	2·15	2·22	1·99	2·26	2·44	2·91
34	Average for all classes . „	1st half	3·10	2·56	2·48	2·70	2·45	2·47	2·46	2·34	2·42	2·64	3·03
		2nd „	...	2·54	2·56	2·70	2·43	2·51	2·41	2·31	2·43	2·64	3·06
35	Other coaching traffic per ton-mile . „	1st half	41·04	40·22	28·36	47·00	31·71	33·97	32·20	33·86	38·08	41·33	42·54
		2nd „	...	38·01	27·80	50·09	33·38	36·69	38·66	38·59	34·72	40·67	44·37

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) & (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to(*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*f*)	23(*a*)	1 (*b*)	30 (*a*)	9(*g*) & (*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
24,12	4,99	45,72	19,75	8,35	6,88	33	57,01	4,37	34,82	31,06	45	1,63	1,92	2,19	29	1st half	18
23,45	5,28	46,53	17,80	7,15	7,53	33	60,27	5,48	32,12	33,40	56	2,14	1,48	2,34	31	2nd „	
9,90	2,42	16,49	7,82	2,85	2,86	27	16,47	1,69	16,83	10,81	31	46	82	92	7	1st half	19
11,70	3,15	18,00	6,49	3,43	3,32	25	22,66	2,31	14,57	12,24	41	69	64	1,02	10	2nd „	
14,22	2,57	29,23	11,93	5,50	4,02	6	40,54	2,63	17,99	23,25	14	1,17	1,10	1,27	22	1st half	20
11,75	2,13	28,53	11,31	3,72	4,21	8	37,61	3,17	17,55	21,16	15	1,45	79	1,32	21	2nd „	
29,39	6,87	38,75	17,19	4,88	6,35	20	41,77	4,23	39,84	21,99	59	60	1,90	87	25	1st half	21
29,29	6,48	30,82	18,04	4,71	7,69	26	49,58	4,37	37,39	21,55	73	1,12	2,47	1,08	22	2nd „	
1,165	162	972	612	186	243	19	1,632	152	1,192	772	18	32	32	65	12	1st half	22
1,284	179	980	642	199	274	18	1,828	146	1,232	924	19	41	33	76	15	2nd „	
2·52	4·23	3·99	2·81	2·62	2·61	1·58	2·56	2·79	3·34	2·85	3·34	1·90	5·94	1·34	2·15	1st half	23
2·28	3·62	3·14	2·81	2·37	2·81	1·39	2·71	2·99	3·03	2·33	3·79	2·69	7·39	1·42	1·49	2nd „	
484	219	1,324	516	181	167	2	1,272	163	1,111	890	19	12	120	44	3	1st half	24
433	194	1,232	498	156	214	3	1,063	158	996	928	19	29	156	54	2	2nd „	
1,092	1,300	3,519	1,536	1,774	806	15	3,831	815	5,409	3,334	50	25	193	65	7	1st half	25
1,194	1,236	3,089	1,909	1,694	806	16	4,260	1,057	3,926	3,042	74	60	226	88	4	2nd „	
4,538	1,397	...	7,343	...	1,954	19	10,766	268	...	...	...	21	...	74	25	1st half	26
5,060	1,326	...	8,665	...	1,999	17	10,792	272	...	...	...	61	...	48	21	2nd „	
255,182	37,694	219,934	105,683	37,049	46,603	1,810	318,229	27,221	338,262	157,975	4,789	5,195	1,822	6,396	1,449	1st half	27
250,729	35,907	171,446	102,006	36,424	57,005	1,506	390,530	27,116	314,240	158,434	6,030	9,511	1,906	8,079	1,231	2nd „	
261,246	40,610	224,777	115,078	39,004	49,530	1,846	334,098	28,467	344,762	162,199	4,858	5,253	2,135	6,579	1,484	1st half	28
257,416	38,663	175,767	113,078	38,274	60,024	1,542	406,645	28,593	319,162	162,404	6,123	9,661	2,288	8,264	1,308	2nd „	
593	264	903	555	252	322	4	3,028	147	837	1,270	30	13	41	18	4	1st half	29
861	233	995	930	173	372	4	3,373	143	804	1,129	28	30	58	33	5	2nd „	
12·84	11·45	15·50	14·33	11·44	13·98	14·86	14·11	26·37	11·75	15·63	17·96	15·21	49·32	11·79	16·94	1st half	30
12·88	11·44	15·39	13·99	11·98	13·91	15·09	13·81	28·19	11·78	15·41	17·33	15·28	49·33	11·58	15·44	2nd „	
6·23	5·68	7·86	6·75	4·53	6·57	7·47	6·42	9·20	4·60	6·23	8·99	7·89	27·48	5·80	7·98	1st half	31
6·20	5·67	8·19	5·97	4·88	6·71	7·71	6·64	8·67	5·82	6·17	9·00	7·86	27·48	5·68	7·37	2nd „	
3·12	4·00	...	3·00	...	2·85	3·84	2·98	4·01	...	...	...	4·50	...	3·00	4·50	1st half	32
3·16	4·00	...	2·98	...	2·89	3·85	2·99	4·01	...	...	...	3·53	...	3·00	4·45	2nd „	
2·00	2·75	3·00	2·50	2·00	2·06	3·00	2·01	2·18	2·03	2·09	1·99	2·00	9·00	2·25	3·00	1st half	33
2·00	2·75	2·99	2·50	2·00	2·06	3·00	2·01	2·20	2·05	2·08	1·99	2·00	9·00	2·25	3·00	2nd „	
2·05	2·93	3·15	2·64	2·16	2·29	3·06	2·14	2·54	2·10	2·25	2·12	2·07	12·94	2·36	3·07	1st half	34
2·06	2·93	3·17	2·65	2·17	2·19	3·07	2·11	2·59	2·12	2·24	2·12	2·09	13·57	2·35	3·05	2nd „	
46·33	48·04	38·92	47·11	37·59	39·82	51·04	28·66	61·35	49·99	44·71	31·43	55·92	213·30	67·90	59·48	1st half	35
38·01	47·99	34·74	50·71	43·16	42·89	51·19	27 34	67·33	49·87	44·65	32·79	42·38	195·91	38·47	43·35	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number.		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	COACHING TRAFFIC—*contd.*												
	UNITS AND UNIT-MILEAGE—*concld.*												
	Average number of units in a train—												
36	1st class . . . . . No.	1st half	0·42	1·36	1·97	1·74	1·51	1·93	2·29	0·95	1·07	1·27	0·90
		2nd „	...	1·21	1·66	1·15	1·39	2·55	2·06	0·92	1·19	1·17	0·87
37	2nd „ . . . . . „	1st half	2·12	3·05	13·02	3·59	3·61	8·36	7·50	7·59	3·38	3·31	1·71
		2nd „	...	3·51	10·76	3·41	3·44	6·57	8·99	6·98	3·70	3·63	1·58
38	3rd or intermediate class . „	1st half	9·89	7·52	13·58	20·57	15·14	16·14	2·35	} 110·38	11·67	14·81	1·51
		2nd „	...	8·05	15·58	16·96	15·20	15·93	2·03		11·99	14·15	1·37
39	4th or lowest „ „	1st half	176·97	235·10	205·56	166·68	213·55	129·92	233·24	113·46	163·15	142·72	160·33
		2nd „	...	215·85	186·31	148·69	211·68	128·31	218·54		157·18	132·50	135·65
40	Total passenger units . . „	1st half	189·31	247·03	236·13	192·58	233·81	156·35	245·38	118·92	179·27	162·11	164·45
		2nd „	...	228·62	214·31	170·21	231·71	156·86	231·64	121·36	174·06	151·45	139·47
41	Other coaching traffic *Tons*	1st half	1·25	1·36	2·90	1·21	2·88	2·51	3·00	1·63	1·58	1·15	1·25
		2nd „	...	1·71	2·94	0·99	2·59	2·84	2·15	1·58	1·70	1·18	1·13
	VEHICLES AND VEHICLE-MILEAGE—												
	Number of coaching vehicles hauled one mile (in thousands)—												
42	1st class . . *Vehicle-miles*	1st half	91	1,224	927	694	4,308	5,063	1,376	358	4,133	1,804	398
		2nd „	...	1,247	930	984	4,527	5,650	1,366	361	4,707	1,845	420
43	2nd „ . . „	1st half	132	1,160	2,093	642	4,748	5,765	1,627	395	4,099	1,502	391
		2nd „	...	1,235	2,094	972	5,057	6,280	1,597	359	4,784	1,675	418
44	3rd or intermediate class „	1st half	166	1,096	799	1,359	4,619	3,641	262	} 1624	4,821	2,487	357
		2nd „	...	1,135	913	1,767	5,435	4,033	256		5,237	2,526	194
45	4th or lowest „ „	1st half	981	10,519	8,926	4,589	30,610	20,529	9,551	1,674	31,308	9,646	2,901
		2nd „	...	9,589	8,920	6,488	33,477	21,938	9,663		32,926	10,119	3,044
46	Other vehicles „	1st half	253	986	1,778	981	5,265	5,906	1,485	161	3,205	855	498
		2nd „	...	959	1,860	1,310	4,965	6,556	1,419	168	4,278	812	519
47	Brake-vans „	1st half	175	1,863	1,493	674	6,114	6,040	2,277	363	6,181	2,522	296
		2nd „	...	1,887	1,464	1,025	6,321	6,318	2,347	363	6,235	2,586	296
48	Total . . . „	1st half	1,748	16,848	16,016	8,946	55,664	46,944	16,578	2,901	53,747	18,816	4,836
		2nd „	...	16,052	16,181	12,546	59,782	50,815	16,648	2,925	58,167	19,563	4,891
	Average number of vehicles in a coaching train—												
49	1st class . . *No.*	1st half	0·72	1·20	0·85	1·12	1·27	1·46	1·30	1·17	1·09	1·25	1·44
		2nd „	...	1·11	0·83	1·11	1·25	1·54	1·27	1·15	1·14	1·19	1·50
50	2nd „ . . „	1st half	1·04	1·13	1·92	1·05	1·41	1·67	1·54	1·30	1·08	1·04	1·43
		2nd „	...	1·10	1·86	1·10	1·40	1·71	1·48	1·15	1·16	1·08	1·49
51	3rd or intermediate class „	1st half	1·31	1·07	0·74	2·19	1·37	1·05	0·25	} 5·32	1·27	1·72	1·31
		2nd „	...	1·01	0·81	2·00	1·50	1·10	0·24		1·26	1·62	0·69
52	4th or lowest „ „	1st half	7·34	10·26	8·19	7·41	9·07	5·94	9·04	5·35	8·28	6·66	10·65
		2nd „	...	8·57	7·95	7·34	9·27	6·00	8·98		7·95	6·52	10·89
53	Other vehicles „	1st half	2·00	0·95	1·63	1·58	1·56	1·71	1·40	0·53	0·85	0·59	1·83
		2nd „	...	0·86	1·66	1·43	1·37	1·79	1·32	0·54	1·03	0·52	1·85
54	Brake-vans „	1st half	1·38	1·62	1·37	1·09	1·81	1·75	2·15	1·19	1·63	1·74	1·09
		2nd „	...	1·69	1·30	1·16	1·75	1·72	2·18	1·16	1·51	1·67	1·06
55	Total „	1st half	13·79	15·43	14·70	14·44	16·49	13·58	15·68	9·51	14·20	13·00	17·75
		2nd „	...	14·34	14·41	14·19	16·54	13·86	15·47	9·35	14·05	12·60	17·47
	Average earnings per coaching vehicle per mile—												
56	1st class . . . *Pies*	1st half	8·45	16·62	23·07	21·19	17·50	15·25	21·96	12·88	11·48	12·02	10·11
		2nd „	...	14·26	20·64	14·12	16·54	15·00	20·32	12·41	11·74	11·76	9·25
57	2nd „ . . „	1st half	15·12	18·39	30·83	23·18	16·70	21·74	24·55	27·40	14·78	17·19	9·38
		2nd „	...	19·91	28·76	19·60	17·08	22·79	25·25	28·13	15·40	18·41	8·02
58	3rd or intermediate class „	1st half	26·44	28·85	63·55	28·09	36·09	45·86	42·62	} 42·70	27·62	26·10	4·69
		2nd „	...	25·55	57·44	25·03	33·05	45·75	38·37		28·58	26·32	7·98
59	4th or lowest „ „	1st half	70·16	55·11	56·07	55·34	52·78	47·05	58·20	43·60	44·62	52·48	44·34
		2nd „	...	60·27	54·13	50·64	50·65	45·95	54·14		44·68	49·59	36·26
60	Other vehicles „	1st half	25·60	56·85	50·33	35·96	58·70	49·87	68·87	104·95	64·99	80·29	29·18
		2nd „	...	76·11	49·26	33·39	62·68	47·97	63·16	114·11	57·10	91·89	26·94

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) and (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal)	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
0·42	1·35	1·37	0·84	0·63	0·69	0·08	0·78	1·07	0·93	1·15	1·06	0·39	3·77	0·68	0·24	1st half	36
0·34	1·08	1·26	0·78	0·51	0·78	0·13	0·58	1·05	0·81	1·01	0·97	0·71	4·66	0·71	0·12	2nd „	
0·94	8·01	3·62	2·51	6·19	3·31	0·79	2·35	5·38	4·54	4·32	2·84	0·77	6·02	0·99	0·38	1st half	37
0·93	6·90	3·15	2·97	5·47	2·94	0·85	2·33	7·24	3·19	3·29	3·88	1·44	6·76	1·15	0·27	2nd „	
3·89	8·61	...	12·00	...	8·03	0·97	6·60	1·77	...	...	...	0·67	...	1·13	2·18	1st half	38
3·94	7·41	...	13·50	...	7·31	0·93	5·90	1·86	...	...	...	1·46	...	0·57	1·43	2nd „	
218·99	232·19	226·35	172·68	129·25	191·57	94·52	195·04	179·55	283·89	204·74	272·52	163·50	56·97	98·30	124·63	1st half	39
195·30	200·58	174·91	158·98	117·08	208·31	81·67	213·63	185·65	255·07	171·37	315·05	229·38	57·01	106·08	86·76	2nd „	
224·24	250·16	231·34	188·03	136·07	203·60	96·36	204·77	187·77	289·36	210·21	276·42	165·33	66·76	101·10	127·63	1st half	40
200·51	215·97	179·32	176·23	123·66	219·34	88·58	222·44	195·80	259·07	175·67	319·90	232·99	68·43	108·51	88·58	2nd „	
0·51	1·73	0·93	0·91	0·88	1·32	0·19	1·36	0·97	0·70	1·65	1·70	0·42	1·29	0·28	0·34	1st half	41
0·67	1·30	1·01	1·45	0·56	1·36	0·19	1·84	0·98	0·65	1·22	1·46	0·72	1·72	0·43	0·36	2nd „	
2,042	274	1,511	807	344	357	14	2,248	231	1,179	1,207	21	42	33	34	6	1st half	42
2,177	281	1,508	799	360	367	14	2,451	247	1,205	1,287	21	56	45	36	5	2nd „	
1,862	384	1,776	671	369	361	13	2,151	205	1,447	1,236	20	42	34	34	5	1st half	43
1,929	419	1,788	726	393	359	14	2,381	229	1,421	1,310	26	56	47	35	5	2nd „	
2,067	289	...	1,260	...	433	23	1,170	116	...	...	...	21	...	31	128	1st half	44
2,147	296	...	1,448	...	448	10	1,170	144	...	...	...	32	...	33		2nd „	
18,247	2,205	14,812	5,880	1,980	3,142	168	21,393	1,993	16,737	9,765	264	662	125	492	118	1st half	45
19,767	2,294	14,600	6,516	1,790	3,590	155	25,512	1,989	16,914	10,974	315	866	151	522		2nd „	
409	128	894	882	158	324	...	1,423	60	1,976	991	7	25	83	38	8	1st half	46
459	131	960	1,320	139	353	...	1,629	68	2,013	1,655	8	33	82	32	8	2nd „	
2,707	414	1,313	687	298	345	27	3,964	291	1,230	1,423	56	12	83	83	16	1st half	47
2,924	443	1,359	705	292	359	26	4,259	292	1,209	1,681	55	21	82	59	20	2nd „	
27,334	3,604	20,306	10,137	3,149	5,462	240	32,354	2,596	22,569	14,622	368	810	275	712	163	1st half	48
29,403	3,864	20,235	11,514	2,974	5,971	219	37,603	2,969	22,762	16,307	425	1,064	325	767	156	2nd „	
1·75	1·69	1·56	1·32	1·20	1·47	0·70	1·38	1·52	0·99	1·56	1·18	1·32	1·03	0·53	0·47	1st half	49
1·69	1·57	1·54	1·24	1·17	1·34	0·74	1·34	1·69	0·98	1·39	1·11	1·36	1·33	0·47	0·36	2nd „	
1·60	2·36	1·33	1·10	1·29	1·43	0·70	1·32	1·35	1·21	1·60	1·14	1·32	1·06	0·53	0·47	1st half	50
1·50	2·33	1·32	1·13	1·27	1·31	0·75	1·30	1·57	1·15	1·42	1·33	1·36	1·42	0·46	0·36	2nd „	
1·78	1·78	...	2·06	...	1·78	1·19	0·72	0·77	...	...	...	0·66	...	0·48	10·98	1st half	51
1·67	1·65	...	2·25	...	1·62	0·55	0·64	0·99	...	...	...	0·77	...	0·43		2nd „	
15·66	13·58	15·24	9·60	6·91	12·92	8·51	13·11	13·14	14·05	12·66	15·05	20·83	3·93	7·55	8·00	1st half	52
15·40	12·83	14·89	10·16	5·78	13·12	8·39	13·96	13·62	13·73	11·87	16·45	20·88	4·50	6·85		2nd „	
0·35	0·79	0·92	1·36	0·55	1·23	0·02	0·87	0·40	1·66	1·29	0·38	0·79	2·59	0·58	0·71	1st half	53
0·36	0·73	1·00	2·06	0·45	1·29	0·02	1·00	0·46	1·64	1·14	0·44	0·78	2·46	1·08	0·50	2nd „	
2·32	2·55	1·35	1·12	1·04	3·47	1·40	2·43	1·92	1·03	1·84	3·18	0·56		1·28	1·36	1st half	54
2·28	2·48	1·39	1·10	0·94	3·14	1·40	2·38	2·00	0·98	1·82	2·85	0·50		0·77	1·37	2nd „	
23·46	22·75	20·90	16·56	10·99	22·45	12·52	19·83	19·10	18·94	18·95	20·93	25·48	8·61	10·95	13·99	1st half	55
22·90	21·58	20·64	17·94	9·61	21·82	11·48	20·57	20·33	18·48	17·64	22·18	25·65	9·71	10·06	10·59	2nd „	
3·04	9·14	13·58	9·18	6·01	6·33	1·80	7·98	18·57	11·07	11·53	16·06	4·51	181·07	15·01	8·78	1st half	56
2·56	7·90	12·57	8·71	5·20	8·09	2·69	5·99	17·40	9·73	11·12	15·33	7·94	200·81	17·35	5·22	2nd „	
3·65	19·23	15·58	15·45	21·78	14·65	8·42	11·43	36·57	17·21	16·80	22·34	4·60	156·65	10·90	9·87	1st half	57
3·83	16·73	14·16	15·70	21·04	15·07	8·67	11·87	40·67	16·10	14·34	26·15	8·32	136·84	14·31	5·57	2nd „	
6·84	19·30	...	17·51	...	12·87	3·15	27·47	9·23	...	...	...	4·55	...	7·12	34·93	1st half	58
7·45	17·95	...	17·88	...	13·03	6·47	27·59	7·57	...	...	...	6·69	...	3·90		2nd „	
27·94	47·62	44·60	44·93	37·43	20·82	33·29	29·95	29·79	40·94	33·83	36·13	15·70	130·48	29·28	33·32	1st half	59
25·33	43·04	35·13	39·14	40·68	32·74	29·21	30·75	29·99	38·02	30·09	38·18	21·97	132·95	34·85		2nd „	
67·22	99·17	39·22	31·39	60·04	39·55	...	60·75	149·04	21·19	57·26	140·37	29·28	106·42	32·41	28·76	1st half	60
71·35	85·37	35·26	35·71	53·73	45·21	...	50·42	142·32	19·93	47·78	107·43	39·13	136·58	15·47	31·38	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	COACHING TRAFFIC—*contd.* VEHICLES AND VEHICLE-MILEAGE—*concld.*												
	Carrying capacity hauled one mile (excluding brakes) (in thousands)—												
61	1st class . . . . *Seats*	1st half	1,506	10,347	23,244	15,141	60,390	67,310	12,750	4,916	64,608	39,214	4,594
		2nd ,,	...	10,437	22,474	21,120	63,670	79,300	12,897	4,852	76,125	40,124	4,914
62	2nd ,, ... ,,	1st half	2,554	15,463	78,054	15,627	105,667	155,342	27,601	8,580	81,142	33,164	4,567
		2nd ,,	...	16,754	74,769	23,796	110,639	171,570	26,749	7,760	95,826	35,800	4,883
63	3rd or intermediate class . ,,	1st half	8,960	36,186	36,026	60,185	212,493	196,488	10,391	89,652 / 91,845	168,510	86,777	7,828
		2nd ,,	...	38,105	40,997	83,590	233,642	221,335	10,164		180,377	88,110	5,241
64	4th or lowest class . . ,,	1st half	50,885	569,757	500,535	259,927	1,768,218	1,038,117	559,874		1,662,398	559,542	103,037
		2nd ,,	...	516,104	491,111	366,900	1,913,881	1,114,040	566,434		1,743,812	588,263	107,905
65	Other vehicles . . . *Tons*	1st half	3,038	8,407	8,871	9,890	54,049	29,608	8,982	875	40,906	23,390	1,533
		2nd ,,	...	8,293	19,016	16,680	46,604	32,257	8,279	931	56,596	23,649	1,586
	Percentage of freight upon capacity hauled—												
66	1st class . . . *Per cent.*	1st half	3·57	13·46	9·22	7·13	8·46	9·89	16·99	5·94	6·80	4·68	5·35
		2nd ,,	...	12·84	8·31	4·84	7·90	11·79	17·34	5·94	6·45	4·54	4·97
67	2nd ,, ... ,,	1st half	10·53	20·27	13·18	14·23	11·53	18·61	28·71	27·00	15·74	14·45	10·21
		2nd ,,	...	23·46	16·16	12·67	11·22	18·31	36·17	28·14	16·00	15·75	9·07
68	3rd or intermediate class ,,	1st half	13·87	21·30	47·13	21·17	24·06	28·40	23·89	37·57 / 38·65	26·20	24·72	5·27
		2nd ,,	...	23·64	42·66	17·93	23·51	28·03	21·51		27·53	24·93	7·30
69	4th or lowest class . ,,	1st half	44·09	42·31	44·76	39·72	40·78	43·27	44·03		37·14	36·92	42·39
		2nd ,,	...	46·78	42·59	35·82	39·96	42·22	41·52		37·33	34·96	35·18
70	Other vehicles . . ,,	1st half	5·20	16·58	35·57	7·59	18·00	29·28	35·35	56·87	14·60	7·10	22·27
		2nd ,,	...	23·15	32·90	5·23	20·07	26·58	28·00	53·19	12·43	7·76	19·87
	WEIGHT OF TRAIN AND TON-MILEAGE.												
	Gross ton-mileage of all coaching trains (in thousands)—												
71	Freight . . . *Ton-miles*	1st half	1,447	16,710	18,969	7,996	57,541	41,949	18,992	2,733	47,088	15,909	3,049
		2nd ,,	...	17,397	18,047	10,002	60,026	43,962	17,558	2,829	50,788	16,128	2,676
72	Dead weight . . . . ,,	1st half	26,236	251,958	256,892	146,359	938,053	789,193	246,509	40,655	809,439	337,599	47,672
		2nd ,,	...	248,895	260,115	203,111	1,021,463	858,557	247,723	41,103	882,068	353,082	46,928
73	Total . . . . . ,,	1st half	27,683	268,668	275,861	154,355	995,594	831,142	265,501	43,388	856,527	353,508	50,721
		2nd ,,	...	266,292	278,162	213,113	1,081,489	902,519	265,281	43,932	932,856	369,210	49,604
	Average weight of a coaching train—												
74	Freight . . . . . *Tons*	1st half	11·42	16·30	17·41	12·91	17·04	12·13	17·97	8·96	12·45	10·99	11·19
		2nd ,,	...	15·56	16·07	11·31	16·62	11·99	16·31	9·04	12·26	10·39	9·56
75	Dead weight . . . . ,,	1st half	206·95	245·73	235·72	236·29	277·84	228·26	233·21	133·22	213·92	233·23	174·99
		2nd ,,	...	222·49	231·70	229·78	282·75	234·23	230·19	131·38	213·00	227·45	167·66
76	Total . . . . . ,,	1st half	218·37	262·03	253·13	249·20	294·88	240·39	231·18	142·18	226·37	244·22	186·18
		2nd ,,	...	238·05	247·77	241·09	299·37	246·22	246·50	140·42	225·26	237·84	177·22
	COST OF WORKING AND PROFITS—												
77	Average cost of hauling a coaching train one mile . . *Rs.*	1st half	2·06	1·25	1·62	1·84	0·99	1·33	1·66	1·20	1·14	1·31	2·62
		2nd ,,	...	1·19	1·78	1·58	1·05	1·53	1·66	1·22	1·18	1·24	1 69
78	Average cost of hauling a coaching vehicle with its load one mile . . . . . *Pies*	1st half	31·93	16·38	23·87	26·45	10·39	21·61	23·56	12·86	17·47	22·38	30·19
		2nd ,,	...	18·17	26·03	23·20	11·00	24·16	24·03	13·20	18·12	21·79	19·79
	Average cost of hauling a coaching unit one mile—												
79	Per passenger unit . . *Pies*	1st half	1·83	0·90	1·18	1·57	0·73	1·42	1·19	0·84	1·15	1·48	2 75
		2nd ,,	...	0·94	1·42	1·52	0·79	1·62	1·27	0·82	1·20	1·50	2·09
80	Other traffic per ton . . ,,	1st half	39·79	10·84	11·73	42·20	6·63	13·61	9·29	4·71	9·12	10·03	39·92
		2nd ,,	...	8·19	12·86	44·93	6·72	16·88	12·18	5·06	10·45	8·99	29·61
81	Average profit on working a coaching train one mile . *Rs.*	1st half	1·27	2·32	1·85	1·16	2·47	1·13	1·98	2·53	1·40	1·16	0·29
	Average profit on working a coaching vehicle one mile—	2nd ,,	...	2·17	1·50	1·07	2·34	0·96	1·68	2·64	1·33	1 09	0·79
82	1st class . . . . . *Pies*	1st half	*−23·48*	0·24	*−0·30*	*−5·26*	7·11	*−6·36*	*−1·60*	0·02	*−5·99*	*−10·36*	*−20·08*
		2nd ,,	...	*−3·91*	*−5·39*	*−9·08*	5·54	*−6·16*	*−3·71*	−0·79	−6·38	*−10·03*	*−10·54*
83	2nd ,, ... ,,	1st half	*−16·81*	2·01	7·46	*−3·27*	6·31	0·13	0·99	14·54	*−2·69*	*−5·19*	*−20·81*
		2nd ,,	...	1·74	2·73	*−5·60*	6·08	*−1·37*	1·22	14·93	*−2·72*	*−3·38*	*−11·77*
84	3rd or intermediate class . ,,	1st half	*−5·49*	7·47	40·18	1·64	25·70	24·27	19·06	29·84 / 30·40	10·15	3·72	*−25·50*
		2nd ,,	...	7·88	31·41	1·83	22·05	21·59	14·34		10·46	4·53	*−11·81*
85	4th or lowest class . . ,,	1st half	38·23	38·73	32·70	28·89	42·39	25·44	34·64		27·15	30·10	14·15
		2nd ,,	...	42·10	28·10	27·44	39·65	21·79	30·11		26·56	27·80	16·47
86	Other vehicles . . . . ,,	1st half	*−6·33*	40·47	26·96	9·51	48·21	28·26	45·31	92·09	47·52	57·91	*−1·01*
		2nd ,,	...	57·94	23·23	10·19	51·88	23·81	39·13	100·91	38·98	70·10	7·15

DIX 18—*continued.*

(*by systems*) *during each half year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) & (*c*)	8 (*c*)	18 (*a*) to (*e*)	(11) (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gonda extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
18,939	2,800	15,077	9,014	6,467	3,672	144	22,394	2,767	11,002	9,862	207	126	408	426	33	1st half	61
20,092	2,912	15,141	8,906	6,758	3,831	150	23,917	2,971	11,547	10,494	270	147	450	498	32	2nd ,,	
27,703	5,167	29,378	8,027	8,311	4,336	144	25,818	2,460	16,006	15,198	241	126	594	426	33	1st half	62
28,444	5,520	29,648	8,707	9,027	4,305	149	28,574	2,746	16,631	16,239	307	169	841	488	32	2nd ,,	
44,783	3,921	...	23,408	...	11,154	490	29,391	2,279	...	...	...	84	...	901	} 3,990	1st half	63
46,203	4,071	...	27,623	...	11,398	276	29,290	3,265	...	...	...	113	...	964		2nd ,,	
537,072	65,421	440,196	171,567	96,122	96,098	5,773	700,961	71,148	542,214	313,805	7,665	20,010	3,016	11,893	} 3,707	1st half	64
580,331	69,829	423,911	189,509	95,400	111,061	5,483	832,391	78,671	548,878	353,416	9,173	24,071	3,613	12,642		2nd ,,	
1,110	498	2,835	5,095	833	3,960	1	7,685	229	4,855	2,761	27	88	322	113	12	1st half	65
1,484	511	3,059	8,079	611	4,126	1	9,840	283	5,117	3,046	34	114	329	244	11	2nd ,,	
2·55	7·81	3·78	5·73	2·80	4·55	1·12	5·68	5·87	10·10	9·02	9·01	9·88	29·64	10·30	8·64	1st half	66
2·15	6·67	3·14	5·58	2·31	5·58	1·64	4·45	5·14	8·63	8·85	6·95	19·99	28·34	10·87	5·64	2nd ,,	
3·94	25·16	11·98	19·14	21·34	18·58	10·43	14·84	33·13	38·80	21·93	20·71	19·41	32·46	15·19	20·59	1st half	67
4·20	22·39	10·42	21·93	18·77	18·72	10·35	14·51	38·50	23·61	18·73	24·21	35·29	26·91	17·98	12·60	2nd ,,	
10·13	35·63	...	31·37	...	17·52	3·80	36·63	11·77	...	...	...	25·28	...	8·91	} 36·94	1st half	68
10·95	32·58	...	31·37	...	17·54	6·21	36·84	8·32	...	...	...	53·70	...	4·48		2nd ,,	
47·50	57·62	49·96	61·60	38·54	48·50	31·36	45·40	38·26	62·39	50·34	62·48	25·96	60·41	53·79	} 35·12	1st half	69
43·21	51·42	39·51	53·83	38·18	51·33	27·48	46·91	36·81	57·25	44·83	65·73	39·51	52·76	63·90		2nd ,,	
53·44	53·06	31·85	10·89	30·30	12·51	...	39·40	64·17	17·24	45·98	111·63	14·96	12·47	16·07	32·24	1st half	70
57·98	45·73	32·51	11·51	28·40	9·02	...	34·28	50·70	15·72	37·06	81·32	26·38	17·49	13·54	47·70	2nd ,,	
16,309	2,735	14,513	7,511	2,635	3,316	115	23,197	1,877	21,676	11,104	323	329	178	416	93	1st half	71
16,347	2,586	11,652	7,772	2,510	3,998	96	27,900	1,886	20,072	10,971	398	612	205	533	84	2nd ,,	
195,780	23,334	175,986	75,489	34,725	42,383	2,200	244,572	21,395	176,373	115,450	3,012	5,282	2,353	3,731	649	1st half	72
214,862	25,133	177,312	88,734	33,842	46,482	2,089	285,469	22,491	79,740	134,157	3,527	6,752	2,712	4,221	680	2nd ,,	
212,039	26,069	190,499	83,000	37,360	45,699	2,315	267,769	23,272	198,049	126,554	3,385	5,611	2,531	4,147	742	1st half	73
231,209	27,719	188,964	96,506	36,352	50,480	2,135	313,369	24,377	199,812	145,128	3,925	7,364	2,917	4,754	764	2nd ,,	
14·00	16·85	14·94	12·27	9·19	13·63	5·99	14·22	12·38	18·19	14·39	18·39	10·37	5·57	6·39	8·02	1st half	74
12·73	14·44	11·89	12·12	8·11	14·61	5·23	15·26	12·91	16·29	11·87	20·78	14·76	6·15	7·00	5·68	2nd ,,	
168·00	143·74	181·12	123·35	121·14	174·22	114·86	149·90	141·12	148·02	149·63	171·38	166·21	73·58	57·34	55·83	1st half	75
167·36	140·39	180·90	138·29	109·34	169·85	110·51	156·16	153·98	145·90	145·11	184·26	162·84	81·08	55·42	46·08	2nd ,,	
182·00	160·59	196·06	135·62	130·33	187·85	120·85	164·12	153·50	166·21	164·62	189·77	176·58	79·15	63·73	63·85	1st half	76
180·09	154·83	192·79	150·41	117·45	184·46	115·74	171·42	166·89	162·19	156·95	205·04	177·60	87·23	62·42	51·76	2nd ,,	
0·85	1·49	1·70	1·28	1·54	1·18	1·41	1·01	1·12	1·41	1·40	1·77	1·46	2·58	1·42	0·64	1st half	77
0·91	1·76	1·84	1·01	1·72	1·21	1·36	1·23	1·58	1·18	1·32	2·13	1·67	1·92	1·34	0·69	2nd ,,	
7·72	14·16	16·67	15·89	19·23	11·90	24·41	11·14	12·47	15·14	15·73	19·22	11·23	57·62	28·20	9·78	1st half	78
8·43	17·66	18·31	11·58	24·55	12·43	24·93	13·05	16·58	12·98	16·07	21·14	12·77	37·86	27·74	14·40	2nd ,,	
0·71	1·09	1·34	1·14	1·33	1·03	2·81	0·89	1·11	0·85	1·17	1·19	1·64	5·25	2·52	0·93	1st half	79
0·86	1·49	1·87	0·88	1·63	0·91	3·11	1·00	1·51	0·80	1·34	1·24	1·34	4·00	2·08	1·41	2nd ,,	
5·54	8·50	15·85	33·70	11·63	12·43	...	6·40	5·68	33·81	13·50	6·40	21·72	112·17	64·14	15·58	1st half	80
4·99	11·73	17·60	26·80	19·29	11·28	...	8·25	8·90	30·21	16·14	8·17	14·63	54·31	73·67	22·66	2nd ,,	
1·67	2·74	2·29	1·53	1·08	1·43	0·17	1·55	1·67	1·93	1·45	1·57	0·44	3·36	*—0·08*	1·51	1st half	81
1·37	1·86	1·30	1·80	0·65	1·60	0·03	1·48	1·41	1·85	1·01	1·66	1·02	5·47	0·08	0·80	2nd ,,	
—4·68	*—5·02*	*—3·09*	*—6·71*	*—13·22*	*—5·57*	*—22·61*	*—3·16*	6·10	*—4·07*	*—4·20*	*—3·16*	*—6·72*	123·45	*—13·19*	*—1·00*	1st half	82
—5·92	*—9·76*	*—5·74*	*—2·87*	*—19·35*	*—4·39*	*—22·24*	*—7·06*	0·82	*—3·25*	*—4·95*	*—5·81*	*—4·83*	162·95	*—10·39*	*—9·18*	2nd ,,	
—4·07	5·07	*—1·09*	*—0·14*	2·55	2·75	*—15·99*	0·29	24·10	2·07	1·07	3·12	*—6·63*	99·03	*—17·30*	*—0·09*	1st half	83
—4·65	*—0·93*	*—4·15*	4·12	*—3·51*	2·59	*—16·26*	*—1·18*	23·49	3·12	*—1·73*	5·01	*—4·45*	98·97	*—13·43*	*—8·83*	2nd ,,	
—0·83	5·14	...	1·62	...	0·97	*—21·29*	16·33	*—3·24*	...	...	...	*—6·68*	...	*—21·08*	} 25·15	1st half	84
—1·03	0·29	...	6·25	...	0·55	*—18·46*	14·54	*—9·01*	...	...	...	*—5·08*	...	*—23·84*		2nd ,,	
20·22	32·86	27·93	29·04	18·20	18·62	8·88	18 81	17·32	25·80	18·15	16·91	4·47	72·86	1·08	} 18·92	1st half	85
16·85	25·38	16 82	27·56	16·13	20·26	4·28	17·70	13·41	25·04	14·02	17·04	9·20	95·08	7·11		2nd ,,	
59·30	85·01	22·65	15·50	40·81	27·65	...	49·61	136·57	6·04	41·53	121·15	18·05	48·80	4·21	18·98	1st half	86
62·87	67·71	16·95	24·18	29·18	32·73	...	37·37	125·74	6·95	31·71	86·29	26·36	98·77	*—12·27*	16·98	2nd ,,	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	Particulars.	Gauge.	5′ 6″										
		Number.		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	COACHING TRAFFIC—*concld.* COST OF WORKING AND PROFITS—*concld.* Average profit on working a coaching unit one mile—												
87	Per passenger unit . . . *Pies*	1st half	1·27	1·66	1·30	1·13	1·72	1·05	1·27	1·50	1·27	1·16	0·33
		2nd „	...	1·60	1·14	1·18	1·64	0·89	1·14	1·49	1·23	1·14	0·97
88	Other traffic per ton . . „	1st half	1·25	29·35	16·63	4·80	25·08	20·36	22·91	29·15	28·96	31·20	2·62
		2nd „	...	29 82	14·94	5·16	26·66	19·81	26·48	33·53	24·27	31 68	14·76
	GOODS TRAFFIC. GROSS RECEIPTS AND TRAIN MILEAGE— (*In thousands.*)												
89	Receipts from goods traffic . *Rs.*	1st half	1·47	83,33	79,26	18,68	2,77,95	2,61,57	64,47	17,44	2,34,02	39,88	6,46
		2nd „	...	65,74	60,36	50,55	2,48,99	1,84,42	63,95	15,84	1,95,78	33,19	10,59
90	Goods train-miles run . . *No.*	1st half	70	1,883	703	371	4,748	4,428	1,541	3·35	4,984	1,028	413
		2nd „	...	1,577	518	709	4,509	3,587	1,500	3·53	4,483	948	472
91	Average goods receipts per train-mile . . . . *Rs.*	1st half	2·10	4·85	11·28	5·03	5·85	5·91	4·18	5·21	4·70	3·88	1·56
		2nd „	...	4·17	11·01	7·17	5·52	5·14	4·26	4·48	4·37	3·50	2 24
	UNITS AND UNIT-MILEAGE. (*In thousands.*)												
92	Tons of goods carried one mile . . . . . *Ton-miles.*	1st half	4,569	322,737	195,997	59,632	1,325,090	729,235	207,253	52,800	964,934	159,936	23,199
		2nd „	...	258,473	156,532	129,961	1,182,625	535,513	199,515	49,722	859,881	128,976	37,510
93	Average sum received for carrying a ton one mile . *Pies*	1st half	6·20	5·28	7·76	6·01	4·03	6·89	5·97	6 34	4·66	4·81	5·35
		2nd „	...	4·88	7 40	7·51	4 01	6·61	6·15	6·12	4·37	4·94	5·42
94	Average number of tons in a train . . . . . *Tons*	1st half	65·14	176·07	278·82	160·67	279·09	164 68	134·50	122·44	193·63	154·57	56·17
		2nd „	...	163 88	285·45	183·36	262·29	149·28	132·99	110·30	191 81	126·08	79·44
	VEHICLES AND VEHICLE-MILEAGE. Number of goods vehicles hauled one mile— (*In thousands.*)												
95	Loaded . . . *Vehicle-miles*	1st half	646	31,471	22,685	8,685	117,827	80,671	27,809	4,993	95,935	22,4°9	4,401
		2nd „	...	21,801	18,418	14,096	103,718	64,589	27,105	4,652	85,177	20,962	6,391
96	Empty . . . „	1st half	183	14 499	5,872	2,143	60,939	25,916	11,910	2,735	31,816	5,801	1,682
		2nd „	...	12,528	3,677	5,535	57,030	18,251	11,482	2,477	25,414	6,124	2,585
97	Brake-vans . . „	1st half	57	3,356	644	388	4,738	3,184	2,493	569	5,097	922	388
		2nd „	...	2,676	453	7·1	4,549	6 505	2,636	618	5,274	895	428
98	Total . . . „	1st half	836	49,326	:9,2 :1	11,221	183,504	114,771	42,213	8,297	132,848	29,162	6,471
		2nd „	...	37,005	22,548	20,372	165,301	89,345	41,223	7,747	115,865	28,001	9,404
	Average number of vehicles in a goods train—												
99	Freight vehicles . . . *No.*	1st half	11·82	25·08	40·62	29·18	37·65	24·07	25·77	17·92	25·63	27·47	14·73
		2nd „	...	21·77	40·29	27·70	35·65	23·09	25·73	15 82	24·67	28·60	19·01
100	Brake-vans . . . . „	1st half	0·81	1·83	0·92	1·05	1·00	1·85	1·62	1·32	1·02	0·89	0·94
		2nd „	...	1·69	0 83	1·04	1·01	1·81	1·76	1·37	1·18	0·94	0 91
101	Total . . . . . „	1st half	12·63	26·91	41 54	30 23	38 65	25·92	27 39	19·24	26 65	28 36	15·67
		2nd „	...	23·46	41,12	28·74	36·66	24·90	27 43	17·19	25·85	29 54	19 92
102	Average earnings per goods vehicle per mile (excluding brakes) . . . . . *Pies*	1st half	34·16	37·10	53·29	33·11	29·85	47·12	31·77	43·33	35·17	27·12	20·39
		2nd „	...	36·77	52·45	49·73	29·74	42·74	31·82	42 66	33 99	23·51	22·64
103	Carrying capacity hauled one mile (excluding brakes). . *Tons*	1st half	11,471	688,506	394,921	140 926	2,601,014	1,516,799	561 373	114,843	1,905,606	355,777	57,245
		2nd „	...	509,396	398,269	264,663	2,347,659	1,181,849	549,341	106,052	1,680,471	347,658	85,233
104	Percentage of freight upon *Per* capacity hauled . . . *cent.*	1st half	39·83	46·88	49 63	42·31	50·95	48 08	36·92	45·98	50·64	44·76	40 53
		2nd „	...	50 74	52·48	49·48	50·37	45·31	36·32	46 88	51·17	37·10	44·01
105	Average load of a goods vehicle (including both loaded and empty) per mile . . *Tons*	1st half	5·51	7·02	6·86	5·51	7·41	6·84	5·22	6 83	7·55	5·64	3·81
		2nd „	...	7 53	7·08	6·62	7·36	6·46	5·17	6·97	7 78	4·76	4·18
106	Average load of a loaded goods vehicle per mile . „	1st half	7·07	10·25	8·64	6·87	11·25	9 04	7·45	10·45	10·06	7·10	5·27
		2nd „	...	11·86	8·10	9·22	11·40	8·29	7·36	10·69	10·10	6·15	5·87
	WEIGHT OF TRAIN AND TON-MILEAGE— Gross ton-mileage of all goods trains— (*In thousands.*)												
107	Freight . . . . . *Tons*	1st half	4,569	322,737	195,996	59,632	1,325,090	729,235	207,253	52,799	964,984	159,236	23,199
		2nd „	...	258,473	156,532	129,962	1,182,625	535,518	199,515	49,722	859,881	128,976	37,510
108	Dead weight . . . . „	1st half	11,179	504,518	241,897	110,028	1,671,917	1,165,987	410,482	86,739	1,293,977	264,088	39,765
		2nd „	...	390,188	187,883	204,655	1,517,715	926,096	401,379	84,237	1,139,414	255,716	62,200
109	Total . . . . . „	1st half	15,748	827,255	437,893	169,661	2,997,007	1,895,222	617,735	139,538	2,258,961	423,324	62,964
		2nd „	...	648,661	344,415	334,620	2,700,340	1,461,609	600,894	133,959	1,999,295	384,692	99,710

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) & (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	23 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
1·34	1·84	1·81	1·50	0·83	1·17	0·25	1·25	1·43	1·25	1·08	0·93	0·43	7·69	—0·16	2·14	1st half	87
1·20	1·44	1·30	1·77	0·54	1·28	—0·04	1·11	1·08	1·32	0·90	0·88	0·75	9·57	0·27	1·64	2nd „	
40·79	39·54	23·07	13·41	25·96	27·39	...	22·26	55·67	16·18	31·21	25·03	34·20	101·13	3·76	43·90	1st half	88
33·02	36·26	17·14	23·91	23·87	31·61	...	19·09	58·43	18·96	28·51	24·62	27·75	141·10	—35·20	21·19	2nd „	
36,55	5,29	47,91	16,81	12,83	10,04	5	1,01,65	5,32	29,94	36,40	37	1·66	1,35	62	37	1st half	89
27,09	3,04	37,46	27,39	6,36	10,25	7	88,23	5,11	31,69	32,35	36	1·64	1,65	71	19	2nd „	
1,168	129	1,456	485	351	279	4	2,207	182	1,021	1,346	8	79	53	70	19	1st half	90
948	92	1,378	587	206	277	5	1,844	168	1,175	1,262	8	83	46	106	17	2nd „	
3·13	4·11	3·29	3·47	3·66	3·59	1·12	4·61	2·92	2·93	2·71	4·47	2·09	2·57	0·88	1·93	1st half	91
2·36	3·31	2·72	4·67	3·08	3·70	1·25	4·51	3·05	2·70	2·56	4·22	1·98	3·57	0·67	1·16	2nd „	
130,129	10,119	121,224	50,519	26,764	27,872	127	819,766	17,158	81,053	104,168	403	5,182	572	2,593	908	1st half	92
94,176	6,652	103,740	69,554	13,361	27,905	183	252,603	14,339	89,574	95,783	402	6,879	842	1,487	672	2nd „	
5·39	10·04	7·59	6·39	9·21	6·92	7·28	6·10	5·35	7·09	6·71	17·74	6·14	45·31	4·56	6·83	1st half	93
5·52	8·78	6·93	7·55	9·14	7·05	7·06	6·33	6·33	6·79	6·48	16·97	4·57	37·52	9·14	5·49	2nd „	
111·39	78·64	83·27	104·24	50·11	98·76	58·88	144·92	94·20	79·36	77·41	48·39	65·35	10·87	37·19	47·51	1st half	94
99·32	72·40	75·31	118·57	34·77	100·61	33·92	136·97	85·56	76·24	75·87	45·47	83·16	18·25	14·00	40·64	2nd „	
23,419	2,419	25,346	10,769	4,441	4,999	41	52,611	2,452	16,421	23,911	118	1,103	196	536	203	1st half	95
17,803	1,608	22,755	14,031	2,741	4,622	52	42,546	2,411	17,781	21,687	116	999	232	733	111	2nd „	
9,582	1,224	11,271	2,075	2,080	1,688	14	20,684	1,306	5,859	5,942	65	436	94	171	123	1st half	96
7,831	902	8,715	2,422	1,023	1,923	17	12,914	1,201	6,854	5,645	71	433	79	230	46	2nd „	
1,630	153	2,002	501	805	92	7	2,309	251	902	1,841	...	31	...	61	29	1st half	97
1,398	83	2,017	580	511	103	10	1,773	252	1,233	1,713	...	38	...	108	23	2nd „	
34,631	3,796	38,619	13,345	7,326	6,779	62	75,604	4,009	22,682	31,694	183	1,570	290	768	355	1st half	98
27,022	2,502	33,487	17,033	4,275	6,848	79	57,233	3,864	25,868	29,045	187	1,470	311	1,121	180	2nd „	
28·25	28·32	25·15	26·51	12·21	23·93	12·74	33·22	20·63	21·33	22·18	21·97	19·41	5·51	10·14	17·10	1st half	99
27·02	27·31	22·85	28·05	9·79	23·60	12·95	30·07	21·55	20·97	21·65	22·27	17·31	6·74	9·54	9·47	2nd „	
1·40	1·18	1·38	1·03	1·51	0·33	1·69	1·04	1·33	0·88	1·37	...	0·39	...	0·88	1·50	1st half	100
1·47	0·90	1·46	0·99	1·33	0·37	1·74	0·96	1·50	1·05	1·36	...	0·46	...	1·01	1·41	2nd „	
29·65	29·50	26·53	27·54	13·72	24·26	14·43	34·26	22·01	22·21	23·55	21·97	19·80	5·51	11·02	18·60	1st half	101
28·49	28·21	24·31	29·04	11·12	23·97	14·69	31·03	23·05	22·02	23·01	22·27	17·77	6·74	10·55	10·88	2nd „	
21·26	27·87	25·12	25·13	37·78	28·83	16·90	26·63	27·17	26·40	23·41	39·08	20·67	89·35	16·74	21·11	1st half	102
20·30	23·26	22·86	31·97	32·45	30·07	18·49	28·81	27·14	24·70	22·73	36·46	22·00	101·61	13·41	23·57	2nd „	
324,808	25,784	288,207	109,042	69,777	60,300	527	641,773	40,064	157,545	218,047	1,538	9,601	1,780	3,158	1,745	1st half	103
232,140	18,493	250,234	146,394	39,441	59,758	672	490,218	39,595	181,482	199,703	1,539	9,171	2,100	4,530	1,140	2nd „	
40·06	39·25	42·06	46·33	38·35	46·22	24·05	49·83	42·81	51·45	48·89	26·12	53·87	32·13	92·10	52·04	1st half	104
37·35	35·97	41·46	47·79	33·83	46·70	27·16	51·53	36·22	49·36	47·96	26·14	75·00	40·08	32·83	58·95	2nd „	
3·94	2·78	3·31	3·93	4·10	4·17	2·32	4·36	4·57	3·72	3·49	2·20	3·37	1·97	3·67	2·78	1st half	105
3·68	2·65	3·30	4·23	3·55	4·25	2·62	4·55	3·97	3·64	3·50	2·15	4·80	2·71	1·47	4·29	2nd „	
5·56	4·18	4·78	4·69	6·03	5·58	3·11	6·03	7·00	4·94	4·36	3·40	4·70	2·92	4·84	4·47	1st half	106
5·29	4·14	4·55	4·96	4·87	6·04	3·49	5·94	5·95	5·04	4·42	3·48	6·39	3·64	2·03	6·05	2nd „	
130,129	10,119	121,224	50,519	26,765	27,878	127	819,766	17,159	81,053	104,168	403	5,181	572	2,593	908	1st half	107
94,176	6,652	103,740	69,554	13,361	27,905	183	252,603	14,340	89,574	95,783	402	6,879	842	1,487	672	2nd „	
174,509	17,539	216,508	76,061	45,181	36,218	358	339,138	19,707	130,690	167,944	1,037	9,011	2,795	3,104	1,245	1st half	108
137,908	12,146	195,777	98,569	26,050	35,970	501	267,343	19,094	151,041	155,046	1,060	8,451	2,742	4,622	855	2nd „	
304,638	27,658	337,732	126,580	71,946	64,091	485	658,904	36,866	211,743	272,112	1,440	14,192	3,367	5,697	2,153	1st half	109
232,084	18,798	299,517	168,123	39,411	63,875	684	519,946	33,434	240,615	250,829	1,462	15,330	3,585	6,109	1,527	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	GOODS TRAFFIC—*concld.*												
	WEIGHT OF TRAIN AND TON-MILEAGE—*concld.*												
	Average weight of a goods train—												
110	Freight . . . . *Tons*	1st half	65·14	176·07	278·82	160·67	279·09	164·68	134·50	122·44	193·63	154·87	56·17
		2nd „	...	163·89	285·45	183·36	282·29	149·28	132·99	110·30	191·81	196·08	79·44
111	Dead-weight . . . . „	1st half	159·39	275·24	344·12	296·44	352·13	263·30	266·38	201·15	259·64	258·85	96·28
		2nd „	...	247·40	342·62	288·75	336·61	258·16	267·55	186·87	254·17	269·80	131·73
112	Total . . . . . „	1st half	224·53	451·31	622·94	457·11	631·22	427·98	400·88	323·59	453·27	411·72	152·45
		2nd „	...	411·29	628·07	472·11	598·90	407·44	400·54	297·17	445·98	405·83	211·17
	COST OF WORKING AND PROFIT.												
113	Average cost of hauling a goods train one mile . *Rs.*	1st half	2·12	2·15	3·99	3·37	2·12	2·37	2·65	1·64	2·29	2·21	2·14
		2nd „	...	2·07	4·51	3·09	2·10	2·53	2·70	1·52	2·34	2·12	2·02
114	Average cost of hauling a goods vehicle with its load one mile . . . *Pies.*	1st half	34·49	16·44	18·86	22·20	10·81	18·91	19·74	13·59	17·16	15·46	27·96
		2nd „	...	18·27	21·47	21·39	11·30	21·02	20·17	14·46	18·23	14·22	20·37
115	Average cost of hauling a goods unit (*viz.*, one ton) one mile . . . . . „	1st half	6·26	2·34	2·75	4·03	1·46	2·76	3·78	1·99	2·27	2·74	7·33
		2nd „	...	2·43	3·03	3·23	1·54	3·25	3·90	2·07	2·35	2·99	4·87
115 A	Average cost of hauling a goods unit one mile, including interest on capital expended on open line at the rate of 5 per cent. per annum . . . . . „	1st half	10·11	5·15	5·16	7·48	2·87	4·93	7·09	5·08	4·33	5·27	15·53
		2nd „	...	5·76	5·76	5·72	3·06	5·90	7·33	5·33	4·59	5·93	11·04
116	Average profit on working a goods train one mile . *Rs.*	1st half	*—0·02*	2·70	7·29	1·66	3·73	3·54	1·53	3·57	2·41	1·67	*—0·58*
		2nd „	...	2·10	6·50	4·08	3·42	2·61	1·56	2·96	2·03	1·38	0·22
117	Average profit on working a goods vehicle with its load one mile . . . *Pies*	1st half	*—0·33*	20·66	34·43	10·91	19·04	28·21	11·43	29·74	18·01	11·66	*—7·57*
		2nd „	...	18·50	30·98	28·34	18·44	21·72	11·65	28·20	15·76	9·29	2·27
11	Average profit on working a goods unit (*viz.*, one ton) one mile . . . . . „	1st half	*—0·06*	2·34	5·01	1·98	2·57	4·13	2·19	4·35	2·39	2·07	*—1·98*
		2nd „	...	2·45	3·37	4·28	2·50	3·36	2·25	4·05	2·02	1·95	0·55
	DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.												
	Percentage on Total Earnings—												
119	Coaching traffic . *Per cent.*	1st half	63·27	28·07	31·63	44·92	29·16	24·26	36·35	22·35	28·65	43·72	52·31
		2nd „	...	34·85	37·12	30·56	32·33	32·80	35·11	24·62	34·23	48·22	36·60
120	Goods traffic . . . . „	1st half	22·13	68·02	66·24	45·11	69·30	74·74	60·86	73 63	69·74	48·72	42·56
		2nd „	...	60·89	60·90	66·39	65·80	66·19	62·41	70·20	64·54	44·18	55·32
121	Sundries, including telegraph . . . . . „	1st half	14·60	3·65	2·13	9·97	1·27	1·00	2·79	4·02	1·61	7·56	4·45
		2nd „	...	3·93	1·98	3·05	1·48	1·01	2·48	5·18	1·23	7·60	7·01
122	Steam-boat earnings . . „	1st half	...	0·26	...	...	0·27	...	...	...	...	...	0·68
		2nd „	...	0·33	...	...	0·39	...	...	...	...	...	0·57
	Total . . „	1st half	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
		2nd „	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
	Percentage of Working Expenses on Total Earnings—												
123	Maintenance . . . *Per cent.*	1st half	22·03	11·60	7·46	18·72	8·30	8·86	12·57	7·47	13·57	21·47	37·17
		2nd „	...	9·42	9·29	9·25	6·92	10·35	15·14	8·88	12 72	19·10	23·14
124	Locomotive expenses . „	1st half	15·14	11·63	16·26	13·26	10·22	18·92	23·06	10·31	20·73	16·25	27·18
		2nd „	...	14·01	18·26	15·70	10·29	22·25	19·81	10·17	23·13	17·49	19·56
125	Carriage and wagon expenses . . . . . „	1st half	3·01	3·36	5·19	7·20	2·88	4·24	6·81	3·12	3·25	3·07	8·22
		2nd „	...	4·24	5·15	4·29	5·89	5·71	8·45	2·97	3·59	3·35	5·88
126	Traffic expenses . . . „	1st half	11·63	7·15	6·18	15·80	7·47	6·83	7·20	5·45	6·88	10·19	13·76
		2nd „	...	8·59	6·99	12·17	7·93	8·77	7·41	5·74	8·13	11·72	12·92
127	General charges . . . „	1st half	16·91	4·84	3·63	6·10	3·18	3·31	4·56	4·99	2·79	4·34	17·91
		2nd „	...	6·03	4·19	3·87	3·59	4·14	5·19	5·45	3·03	4·65	14·06
128	Miscellaneous expenses . „	1st half	7·48	3·53	1·17	2·39	2·65	1·99	3·65	1·74	1·29	2·19	5·58
		2nd „	...	3·03	2·50	4·48	1·88	2·44	3·51	1·71	1·37	3·46	5·24
129	Steam-boat expenses . „	1st half	...	0·62	...	...	0·25	...	...	...	*—0·01*	...	1·59
		2nd „	...	1·38	...	...	0·46	...	...	...	0·01	...	0·53
130	TOTAL WORKING EXPENSES „	1st half	76·20	42·78	39·89	63·57	34·95	44·15	57·85	33·08	48·50	57·51	111·41
		2nd „	...	46·65	46·38	49·76	36·96	53·66	59·51	34 92	51·98	59·77	81·28

DIX 18—*continued.*

(by systems) during each half-year of 1905—contd.

do not prepare these statistics.

3′3¾″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) & (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	12 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma	Eastern Bengal.	Hyderabad-Godavari-Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal)	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
111·39	78·64	83·27	104·24	50·11	99·76	29·58	144·92	94·20	79·36	77·41	48·39	65·35	10·87	37·19	47·51	1st half	110
99·32	72·40	75·30	118·57	34·77	100·61	33·92	136·97	85·55	76·24	75·87	47·85	53·16	18·25	14·00	40·64	2nd „	
149·38	126·30	148·72	156·94	84·60	129·64	83·49	153·69	108·20	127·96	124·81	124·58	113·64	53·15	44·51	65·15	1st half	111
145·44	132·20	142·12	168·04	67·80	129·63	93·14	144·96	113·93	128·56	122·81	126·11	102·18	59·45	43·51	51·73	2nd „	
260·77	214·94	231·99	261·18	134·71	229·40	113·07	298·61	202·40	207·32	202·22	172·97	178·99	64·02	81·70	112·66	1st half	112
244·76	204·60	217·42	286·61	102·57	230·29	127·06	281·93	199·48	204·80	198·68	173·96	185·34	77·70	57·51	93·37	2nd „	
1·22	1·99	2·01	2·46	1·57	1·44	1·32	1·84	1·47	1·76	1·73	1·62	1·48	2·09	1·82	1·13	1st half	113
1·24	2·32	2·07	1·93	1·80	1·52	1·49	2·04	1·89	1·49	1·68	1·80	1·74	1·71	1·24	1·23	2nd „	
8·27	13·53	15·33	17·83	16·19	11·53	19·93	10·62	13·69	15·86	14·95	14 16	14·62	72·75	24·50	12·74	1st half	114
8·80	16·33	17·41	13·19	18·97	12·33	22·10	13·02	16 85	13·67	14·86	15·57	19·37	48·61	24·90	25·03	2nd „	
2·10	4·87	4·63	4·53	3·94	2·77	8·58	2·13	3·00	4·26	4·29	6·43	4·34	36·89	9·40	4·59	1st half	115
2·39	6·16	5·29	3·12	5·34	2·89	8·43	2·86	4·24	3 76	4·24	7·25	4·03	17·95	16·97	5·83	2nd „	
4·59	10·37	8·01	8·64	7·06	4·92	...	4·06	5·42	7·54	8·44	31·07	10·95	118·86	18·49	10·08	1st half	115 A.
5·36	12·78	9·10	6·28	10·34	4·95	16·57	4·69	7·00	6·94	8·92	31·92	9·57	73·31	32·55	12·48	2nd „	
1·91	2·12	1·28	1·01	2·09	2·15	*—0·20*	2·77	1·45	1·17	0·98	2·85	0·61	0 48	*—0·94*	0·80	1st half	116
1·62	0·99	0·65	2·74	1·28	2·18	*—0·24*	2·47	1·16	1·21	0·88	2·42	0·24	1·86	*—0·57*	*—0·07*	2nd „	
12·99	14·34	9·79	7·30	21·59	17·30	*—3·03*	16·01	13·48	10·54	8·46	24·92	6·05	16·60	*—17·76*	8·37	1st half	117
11·50	6·93	5·45	19·78	13·48	17·74	*—3·61*	15·79	10·29	11·08	7·87	20·69	2·63	53·00	*—11·49*	*—1·46*	2nd „	
3·29	5·17	2·96	1·86	5·27	4·15	*—1·30*	3·67	2·95	2·83	2 42	11·31	1·80	8·42	*—4·84*	2·24	1st half	118
3·13	2·62	1·64	4·43	3·80	4·16	*—1·37*	3·47	2·59	3·03	2·24	9·73	0·54	19·67	*—7·33*	*—0·34*	2nd „	
41·97	55·21	43·93	46·44	26·88	37·76	85·20	28·59	42·04	56·27	37·06	59·90	24·26	57 43	57·88	39·15	1st half	119
49·01	66·23	44·31	35·46	41·09	41·74	77·77	36·51	44 48	53·24	39·23	66·23	39·92	58·61	59·73	50·51	2nd „	
49·62	42·53	54·32	45·41	70·68	59·72	13·53	69·58	52·86	42·29	61·35	37·90	71·95	40·81	40·91	57·92	1st half	120
42·06	31·07	53·86	53·84	55·49	55·65	20·36	61·28	51·99	45·13	58·90	32·40	58·69	39·01	39·21	44·09	2nd „	
1·52	2·26	1·40	1·04	2·44	2·52	1·18	1·83	0·44	1·48	1·59	2·20	1·79	1·76	1·21	2·93	1st half	121
2·66	2·70	1·50	1·78	3·42	2·61	1 87	2·21	3·53	1·63	1·87	0·53	1·39	2·38	1·06	5·40	2nd „	
6·89	...	0·35	7·11	...	...	...	...	4·66	...	...	...	...	...	...	...	1st half	122
6·27	...	0·33	8·92	...	...	...	...	...	...	...	0·84	...	...	...	...	2nd „	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100 00	100·00	100·00	100·00	100·00	100·00	1st half	
100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100 00	100·00	100·00	2nd „	
10·21	11·70	16·39	18·99	21·59	12·87	...	7·46	8·25	12·54	16·33	19·01	16·12	4·30	58·61	14·68	1st half	123
13·36	17·51	19·23	10·82	24·58	12·74	...	9·29	10·20	12·00	16·61	20 44	22·63	*—1·35*	44·61	28·22	2nd „	
10·61	10·85	18·38	16·19	11·10	15·22	...	16·26	14·45	19·26	20·35	16·66	23·25	29·32	38·59	16·44	1st half	124
10·51	13·08	25·55	9·53	15·52	16·07	...	18·25	11·76	15·13	22·39	13·70	21·50	18·87	41·12	19·78	2nd „	
2·63	2·69	3·66	1·76	1·49	2·52	...	5·19	4·37	4·01	5·42	2·16	4·54	3·10	10·77	2·08	1st half	125
3·02	5·51	5·34	2·58	2·15	2·33	...	5·15	3·47	4·42	5·18	2·36	8·27	2·88	7·13	4·66	2nd „	
7·40	7·37	7·98	9·97	6·51	5·74	...	6·19	7·92	7·33	7·82	8·51	12·51	10·13	22·24	6·32	1st half	126
8·62	8·78	10·11	8·37	9·96	5·50	...	6·99	7·94	7·71	8·60	7·86	11·14	8·01	21·83	7·79	2nd „	
4·67	8 25	5·68	5·78	7·08	3 74	...	3 63	7·56	6·14	7·51	6·73	12·62	10·71	14·16	6·58	1st half	127
5·73	10·52	6·93	3·82	11·61	3·51	...	4·19	7·64	6·57	8·16	6·25	12·63	6·60	13 13	10·25	2nd „	
0·72	1·50	1·17	1·71	0·68	2·30	...	1·60	1·75	1·33	1·56	1·68	1·00	2·41	2·54	0·59	1st half	128
0·99	1·24	1·23	1·64	1·97	2·20	...	1·86	1·63	1·54	1·60	1·76	1·26	1·34	2·70	0·94	2nd „	
3·58	...	0·35	6·67	...	...	...	...	...	...	...	...	...	...	3·38	...	1st half	129
3·91	...	0·96	5·28	...	...	...	...	...	...	...	...	...	...	3·58	...	2nd „	
39·62	42·36	54·09	61·27	48·45	42·39	..	40·33	44·30	50·61	58·99	47·77	72·04	59·97	150·29	46·69	1st half	130
46·16	56·64	69·35	42·04	65·79	42·25	102·17	45·73	42·64	47·37	62·54	52·37	77·43	36·35	134·10	71·64	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*c*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal-Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	*Oudh and Rohilkhand.	Assam-Bengal.
	PER MILE OF LINE MAINTAINED.									TABLE A.—MAINTENANCE OF			
131*a*	General superintendence (including office expenses) . . *Rs.*	1st half	186·85	137·56	181·73	327·23	212·51	145·38	184·12	138·05	139·14	130·46	147·80
		2nd „	...	153·40	175·70	257·42	228·39	142·09	164·06	129·33	145·08	435·28	143·75
132*a*	Maintenance and renewal of permanent-way . . . „	1st half	345·80	603·36	1,676·73	764·60	616·59	444·20	237·02	603·98	749·42	363·44	
		2nd „	...	268·36	567·35	707·99	266·84	464·86	532·75	274·12	371·48	540·55	294·17
133*a*	Repairs of bridges, &c. . . „	1st half	15·60	297·56	105·75	290·89	103·70	179·70	93·99	44·00	77·70	176·59	116·21
		2nd „	...	16·43	164·52	138·72	165·94	220·44	104·97	64·08	62·58	168·89	77·12
134*a*	Conservancy of rivers . . „	1st half	...	...	...	...	...	...	...	0·13	15·56	3·46	...
		2nd „	...	...	...	0·17	...	...	...	0·08	37·64	3·54	...
135*a*	Repairs of stations and buildings„	1st half	76·75	48·37	139·43	363·57	235·33	131·00	83·21	128·68	177·00	210·86	62·50
		2nd „	...	73·37	107·79	276·41	314·35	118·58	102·49	38·97	155·85	171·01	38·32
136*a*	Other charges (net) . . „	1st half	65·52	25·33	47·06	154·75	166·52	81·49	149·33	56·58	182·96	124·55	67·13
		2nd „	...	66·95	96·55	96·76	197·74	83·03	200·88	65·07	241·37	120·45	39·45
137*a*	Total maintenance, &c. . „	1st half	1,149·50	854·12	1,077·33	2,813·17	1,502·66	1,154·16	954·35	504·46	1,196·34	1,395·34	762·08
		2nd „	...	578·51	1,111·91	1,527·47	1,172·76	1,029·00	1,105·15	571·65	1,014·00	1,139·72	592·81
	PER MILE OF TRACK, INCLUDING SIDINGS.												
131*b*	General superintendence (including office expenses) . . *Rs.*	1st half	157·40	119·08	122·19	168·53	135·35	104·09	152·38	122·79	109·53	113·90	131·65
		2nd „	...	130·84	117·65	158·06	145·35	104·02	135·76	115·00	113·60	117·84	127·77
132*b*	Maintenance and renewal of permanent-way . . . „	1st half	677·94	298·89	405·68	863·55	499·71	441·49	367·63	210·81	475·42	654·26	328·21
		2nd „	...	228·90	379·90	434·74	169·50	340·32	440·85	243·74	290·85	470·85	261·43
133*b*	Repairs of bridges, &c. . . „	1st half	13·14	257·56	71·10	149·81	66·04	128·67	77·79	39·13	61·16	154·17	103·52
		2nd „	...	14·01	110·16	115·88	105·60	161·39	86·37	56·98	49·00	147·11	68·54
134*b*	Conservancy of rivers . . „	1st half	...	...	...	...	...	...	...	0·12	12·25	3·02	...
		2nd „	...	...	...	0·11	...	...	...	0·07	29·47	3·09	...
135*b*	Repairs of stations and buildings„	1st half	64·66	41·87	93·75	187·25	149·88	93·79	68·87	25·50	139·32	184·08	55·69
		2nd „	...	62·58	72·17	169·73	200·05	86·81	84·81	34·65	122·02	148·96	34·05
136*b*	Other charges (net) . . „	1st half	55·19	21·93	31·64	79·70	106·05	58·35	123·59	50·32	144·01	108·73	59·79
		2nd „	...	57·09	64·65	59·41	125·83	60·79	166·24	57·85	188·97	104·93	35·06
137*b*	Total maintenance, &c. . „	1st half	968·33	739·23	724·36	1,448·84	957·03	826·39	790·26	448·67	941·69	1,218·16	678·86
		2nd „	...	493·42	744·53	937·93	746·33	753·33	914·53	505·29	793·91	992·78	526·85
	PER TOTAL TRAIN-MILE.												
131*c*	General superintendence (including office expenses) . . *Rs.*	1st half	1·94	1·37	1·34	1·46	0·93	0·79	1·58	1·62	0·97	1·06	2·55
		2nd „	...	1·60	1·39	1·20	1·00	0·88	1·21	1·46	1·02	1·09	2·26
132*c*	Maintenance and renewal of permanent-way . . . „	1st half	8·35	3·43	4·46	7·46	3·42	3·36	3·32	2·79	4·19	6·10	6·37
		2nd „	...	2·80	4·50	3·30	1·17	2·87	3·93	3·09	2·62	4·36	4·64
133*c*	Repairs of bridges, &c. . . „	1st half	0·16	2·95	0·78	1·29	0·45	0·98	0·81	0·52	0·54	1·44	2·01
		2nd „	...	0·17	1·31	0·88	0·73	1·36	0·77	0·72	0·44	1·36	1·22
134*c*	Conservancy of rivers . . „	1st half	...	...	...	...	...	...	...	...	0·11	0·03	...
		2nd „	...	...	...	...	...	...	...	...	0·27	0·03	...
135*c*	Repairs of stations and buildings„	1st half	0·80	0·48	1·03	1·62	1·03	0·71	0·71	0·34	1·23	1·72	1·08
		2nd „	...	0·77	0·86	1·29	1·38	0·73	0·76	0·44	1·10	1·38	0·61
136*c*	Other charges (net) . . „	1st half	0·68	0·24	0·35	0·89	0·72	0·44	1·28	0·67	1·27	1·01	1·16
		2nd „	...	0·69	0·76	0·45	0·87	0·52	1·48	0·74	1·71	0·97	0·63
137*c*	Total maintenance, &c. . . „	1st half	11·93	8·47	7·96	12·52	6·55	6·28	8·20	5·94	8·31	11·36	13·17
		2nd „	...	6·03	8·82	7·12	5·15	6·36	8·15	6·45	7·16	9·19	9·35
	PER 1,000 GROSS TON-MILES.												
131*d*	General superintendence (including office expenses) . . *Rs.*	1st half	0·55	0·22	0·21	0·28	0·12	0·14	0·29	0·27	0·17	0·21	0·36
		2nd „	...	0·30	0·23	0·28	0·13	0·17	0·27	0·25	0·19	0·25	0·71
132*d*	Maintenance and renewal of permanent-way . . . „	1st half	2·37	0·56	0·70	1·42	0·43	0·61	0·70	0·45	0·74	1·22	2·40
		2nd „	...	0·52	0·76	0·81	0·16	0·55	0·86	0·54	0·48	0·90	1·46
133*d*	Repairs of bridges, &c. . . „	1st half	0·04	0·48	0·12	0·25	0·06	0·18	0·15	0·08	0·09	0·28	0·75
		2nd „	...	0·03	0·22	0·22	0·10	0·26	0·17	0·13	0·08	0·28	0·38
134*d*	Conservancy of rivers . . „	1st half	...	...	...	...	...	...	...	...	0·02	0·01	...
		2nd „	...	...	...	...	...	...	...	...	0·05	0·01	...
135*d*	Repairs of stations and buildings„	1st half	0·23	0·08	0·16	0·31	0·13	0·13	0·13	0·06	0·22	0·34	0·41
		2nd „	...	0·14	0·14	0·31	0·19	0·14	0·17	0·08	0·20	0·28	0·19
136*d*	Other charges (net) . . „	1st half	0·19	0·04	0·06	0·13	0·09	0·08	0·24	0·11	0·22	0·20	0·44
		2nd „	...	0·13	0·13	0·11	0·11	0·10	0·32	0·13	0·32	0·20	0·20
137*d*	Total maintenance, &c. . . „	1st half	3·38	1·38	1·25	2·39	0·83	1·14	1·51	0·97	1·46	2·26	4·96
		2nd „	...	1·12	1·48	1·73	0·69	1·22	1·79	1·13	1·32	1·90	2·94

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) & (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
WAY, WORKS AND STATIONS.																	
36·69	36·03	128·17	115·66	116·90	19·38		92·88	65·79	150·92	82·00	38·84	76·60	239·33	136·40	6·09	1st half	131*a*
91·68	49·72	136·21	113·45	111·45	18·34		96·51	73·83	162·11	80·87	39·00	56·52	—*161·66*	169·51	6·24	2nd „	
239·32	199·54	585·12	337·77	777·36	171·31		308·40	148·78	446·36	354·27	116·59	86·93	...	232·36	131·93	1st half	132*a*
284·34	241·49	440·63	275·23	406·80	239·68		289·30	190·61	281·96	281·83	273·07	45·32	59·51	187·06	116·16	2nd „	
67·70	6·80	138·47	282·94	22·36	4·56		54·05	37·56	44·87	51·72	0·37	...	...	100·14	8·63	1st half	133*a*
83·84	27·32	211·97	158·10	63·64	6·13		90·37	47·00	118·54	51·61	0·47	14·63	2·93	155·42	4·32	2nd „	
0·40	...	—*0·06*	...	...	...		...	6·25	...	...	...	...	...	1·67	...	1st half	134*a*
0·47	...	0·18	0·57	...	...		...	— *3·01*	...	...	...	...	...	...	...	2nd „	
45·32	15·41	115·29	107·89	42·78	17·06		71·27	23·99	38·40	48·85	7·50	...	...	148·10	18·71	1st half	135*a*
50·38	33·41	83·67	92·27	43·80	10·49		59·21	44·82	55·35	66·99	10·37	116·70	1·68	52·61	43·96	2nd „	
50·45	18·16	112·67	100·57	42·53	47·54		24·06	13·31	—*24·57*	45·07	11·90	3·98	...	50·05	1·23	1st half	136*a*
49·39	32·09	125·63	58·95	94·81	6·97		72·31	35·46	4·75	49·41	10·40	43·91	1·33	45·58	48·06	2nd „	
482·38	325·99	1,079·66	944·83	1,001·93	259·85		550·66	295·63	655·98	581·91	175·20	167·51	239·33	668·72	166·64	1st half	137*a*
530·60	384·03	898·29	608·57	720·50	281·61		607·70	388·71	622·71	550·71	383·31	277·08	—*96·21*	610·18	218·74	2nd „	
74·95	78·36	110·08	98·07	105·16	18·45		79·21	58·27	133·82	73·60	36·43	71·03	216·60	124·11	5·73	1st half	131*b*
79·31	45·20	116·31	96·45	100·28	17·42		82·38	65·38	143·38	72·94	36·58	52·52	—*140·50*	154·10	5·87	2nd „	
200·85	181·64	502·54	286·42	699·26	163·10		262·98	131·74	395·78	318·81	109·37	80·61	...	211·43	124·04	1st half	132*b*
220·46	219·54	376·25	234·00	366·02	227·77		246·92	168·79	249·38	254·17	256·11	43·12	58·93	170·04	109·21	2nd „	
58·53	6·19	118·93	239·92	20·10	4·34		46·10	33·26	39·79	46·54	0·34	...	..	91·12	8·11	1st half	133*b*
72·53	24·83	181·00	134·42	57·26	5·82		77·13	41·61	104·84	46·54	0·45	13·59	2·65	141·28	4·06	2nd „	
0·34	...	—*0·05*	...	...	..		...	5·53	...	...	...	...	...	1·52	...	1st half	134*b*
0·41	...	0·16	0·48	...	...		...	—*2·66*	...	...	...	...	...	...	...	2nd „	
39·18	14·03	93·02	91·49	38·48	16·24		60·76	21·24	34·05	43·96	7·03	...	...	134·77	17·59	1st half	135*b*
43·58	30·37	71·44	78·45	* 39·41	9·98		50·54	39·68	43·96	60·42	9·73	103·44	1·52	47·83	41·32	2nd „	
43·63	16·53	96·76	85·28	38·26	45·23		20·50	11·79	—*21·79*	40·56	11·16	3·69	...	45·54	1·20	1st half	136*b*
42·73	29·18	107·27	50·13	85·29	6·63		61·72	31·40	4·19	44·56	9·76	40·80	1·21	41·43	45·19	2nd „	
417·48	296·75	927·23	801·18	901·26	247·41		469·55	261·83	581·65	523·87	164·33	155·33	216·60	603·49	156·67	1st half	137*b*
459·02	349·12	853·43	593·93	648·26	267·62		518·69	344·20	550·75	478·63	312·63	257·47	—*87·19*	554·67	205·65	2nd „	
0·89	2·12	1·13	1·26	1·36	0·49		0·77	0·89	1·48	1·03	1·61	2·44	2·69	2·14	0·17	1st half	131*c*
1·00	1·32	1·24	1·16	1·72	0·44		0·87	0·97	1·46	1·02	1·53	1·66	—*1·93*	1·96	0·18	2nd „	
2·38	4·91	5·17	3·67	9·06	4·38		2·55	2·00	4·37	4·46	4·84	2·77	...	3·64	3·86	1st half	132*c*
2·77	6·39	4·01	2·83	6·28	5·80		2·60	2·51	2·54	3·55	10·67	1·33	0·71	2·17	3·34	2nd „	
0·69	0·17	1·22	3·07	0·26	0·12		0·45	0·51	0·44	0·65	0·01	...	...	1·57	0·25	1st half	133*c*
0·91	0·73	1·92	1·62	0·93	0·15		0·81	0·62	1·07	0·65	0·01	0·43	0·04	1·80	0·12	2nd „	
0·01	...	...	...	...	...		...	0·08	...	...	...	...	...	0·03	...	1st half	134*c*
...	...	...	0·01	...	...		...	—*0·04*	...	...	...	...	...	...	...	2nd „	
0·47	0·38	1·02	1·17	0·50	0·43		0·58	0·32	0·37	0·61	0·31	...	...	2·32	0·55	1st half	135*c*
0·55	0·88	0·76	0·95	0·67	0·25		0·53	0·59	0·50	0·84	0·40	3·43	0·02	0·61	1·26	2nd „	
0·50	0·45	1·00	1·09	0·50	1·20		0·19	0 17	—0·24	0·57	0·49	0·13	...	0·78	0·04	1st half	136*c*
0·54	0 84	1·14	0·60	1·47	0·17		0·66	0·46	0·03	0·62	0·41	1·29	0·01	0·53	1·38	2nd „	
4·24	8·03	9·54	10·26	11·68	6·62		4·54	3·97	6·42	7·32	7·26	5·34	2·69	10·48	4·87	1st half	137*c*
5·77	10·16	9·07	7·17	11·12	6·81		5·47	5·11	5·60	6·68	13·02	3·14	—*1·75*	7·07	6·23	2nd „	
0·25	0·72	0·33	0·41	0·42	0·16		0·20	0·31	0·50	0·34	0·54	0·86	2·41	1·83	0·12	1st half	131*d*
0·30	0·47	0·37	0·34	0·57	0·13		0·23	0·32	0·49	0·35	0·48	0·57	—*1·47*	2·06	0·16	2nd „	
0·66	1·66	1·48	1·20	2·78	1·29		0·66	0 70	1·47	1·48	1·64	0 97	...	3·12	2·56	1st half	132*d*
0·82	2·33	1·21	0·82	2·10	1·74		0·72	0·85	0·87	1·22	3·42	0·46	0·54	2·27	2·85	2nd „	
0·19	0·06	0·35	1·00	0·06	0·03		0·11	0·17	0·15	0·22	...	...	...	1·34	0·17	1st half	133*d*
0·27	0·26	0·58	0·47	0·33	0·05		0·23	0·21	0·36	0·22	...	0·14	0·03	1·89	0·10	2nd „	
...	...	...	...	...	...		...	0·03	...	...	...	...	...	0·02	...	1st half	134*d*
...	...	0·01	...	...	...		...	—*0·01*	...	...	...	...	...	...	...	2nd „	
0·13	0·13	0·29	0·38	0·15	0·13		0·16	0·11	0·13	0·20	0·10	...	...	1·99	0·36	1st half	135*d*
0·16	0·32	0·23	0·28	0·22	0·08		0·15	0·20	0·17	0·29	0·13	1·17	0·02	0·64	1·07	2nd „	
0·14	0·15	0·29	0·36	0·16	0·36		0·05	10·06	—*0·08*	0·19	0·16	0·04	...	0·67	0·02	1st half	136*d*
0·16	0·31	0·34	0·17	0·49	0·05		0·18	0·16	0 02	0·22	0·13	0·44	0·01	0 55	1·18	2nd „	
1·37	2·72	2·14	3·35	3·59	1·97		1·18	1·38	2·17	2·43	2·44	1·87	2·41	8·97	3·23	1st half	137*d*
1·71	3·69	2·74	2·08	3·71	2·05		1·51	1·73	1·91	2·30	4·16	2·78	—*0·37*	7·41	5·36	2nd „	

Included with the Assam-Bengal.

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*), to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	TABLE B.—LOCOMOTIVE												
	Average price of fuel per ton in terms of Coal . Rs.	1st half	5·89	2·96	16·68	6·02	1·97	11·11	10·79	4·63	13·61	7·33	7·42
		2nd „	...	2·57	14·88	6·17	1·97	11·32	10·14	4·67	13·76	8·02	7·44
	Wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.												
138*a*	General superintendence (including office expenses) . . . . Annas	1st half	0·55	0·84	1·03	0·64	0·75	0·62	0·57	0·88	0·56	0·57	1·04
		2nd „	...	1·12	1·05	0·54	0·76	0·69	0·60	0·81	0·58	0·63	0·98
139*a*	Running expenses . . „	1st half	1·23	2·32	3·01	2·24	2·19	2·77	1·91	1·82	1·49	1·16	1·70
		2nd „	...	2·35	2·98	1·76	2·17	2·50	1·97	1·82	1·51	1·12	1·61
140*a*	Fuel . . . . . „	1st half	2·22	1·39	6·21	2·69	0·95	4·52	4·61	2·00	5·18	3·12	2·73
		2nd „	...	1·15	5·92	2·69	0·96	4·39	4·32	1·83	5·38	3·36	2·40
141*a*	Water . . . . . „	1st half	0·17	0·17	0·49	0·21	0·11	0·31	0·33	0·27	0·20	0·12	0·21
		2nd „	...	0·17	0·47	0·17	0·12	0·33	0·29	0·25	0·24	0·18	0·21
142*a*	Oil, tallow and other stores . . . . „	1st half	0·34	0·28	0·46	0·11	0·31	0·39	0·34	0·40	0·26	0·28	0·30
		2nd „	...	0·34	0·45	0·26	0·35	0·46	0·36	0·34	0·32	0·26	0·28
143*a*	Maintenance and renewal of locomotives . . „	1st half	3·31	2·04	3·70	1·88	2·58	3·45	4·63	2·01	3·24	1·42	2·26
		2nd „	...	2·13	4·69	6·12	2·02	3·74	3·16	1·67	2·73	1·84	1·63
143A (*a*)	Maintenance and renewal of machinery, tools and plant . . . . „	1st half	0·06	0·06	0·61	0·51	0·05	0·21	0·15	0·16	0·33	0·12	0·04
		2nd „	...	0·17	0·68	0·22	0·22	0·22	0·16	0·13	0·30	0·24	0·02
144*a*	Other charges (net) . . „	1st half	0·32	1·41	1·25	0·49	1·13	1·16	2·50	0·67	1·44	1·81	1·35
		2nd „	...	1·54	1·09	0·32	1·07	1·04	1·75	0·54	1·96	0·83	0·76
145*a*	Total locomotive expenses . . . . . „	1st half	8·20	8·51	17·36	8·87	8·07	13·43	15·04	8·21	12·70	8·60	9·63
		2nd „	...	8·97	17·33	12·08	7·67	13·67	12·61	7·38	13·02	8·41	7·89
	Fuel consumed in terms of Coal (Kurhurbaree) . *lbs.*	1st half	42·13	65·88	57·12	62·46	71·68	56·92	59·82	59·73	53·25	53·68	49·26
		2nd „	...	62·92	55·70	60·79	67·84	54·34	59·61	54·96	54·72	52·83	42·53
	Wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...
	PER ENGINE-MILE.												
138*b*	General superintendence (including office expenses) . . . . Annas	1st half	0·45	0·71	0·86	0·43	0·56	0·55	0·48	0·73	0·49	0·48	0·86
		2nd „	...	0·95	0·89	0·37	0·57	0·61	0·51	0·69	0·51	0·53	0·79
139*b*	Running expenses . . „	1st half	1·00	1·97	2·50	1·51	1·62	2·42	1·61	1·52	1·30	0·98	1·39
		2nd „	...	2·00	2·52	1·21	1·63	2·46	1·67	1·54	1·31	0·95	1·29
140*b*	Fuel . . . . . „	1st half	1·82	1·18	5·36	1·81	0·71	3·94	3·89	1·67	4·52	2·65	2·24
		2nd „	...	0·98	5·01	1·85	0·73	3·86	3·65	1·55	4·68	2·87	1·93
141*b*	Water . . . . . „	1st half	0·14	0·14	0·41	0·14	0·08	0·27	0·28	0·23	0·18	0·10	0·17
		2nd „	...	0·14	0·39	0·12	0·09	0·29	0·25	0·21	0·21	0·11	0·16
142*b*	Oil, tallow and other stores . . . . „	1st half	0·28	0·25	0·38	0·07	0·23	0·34	0·28	0·33	0·23	0·24	0·24
		2nd „	...	0·29	0·38	0·18	0·26	0·41	0·30	0·29	0·28	0·23	0·22
143*b*	Maintenance and renewal of locomotives . . „	1st half	2·72	1·74	3·07	1·37	1·93	3·02	3·91	1·69	2·83	1·20	1·85
		2nd „	...	1·81	3·97	4·22	1·52	3·29	2·67	1·41	2·37	1·57	1·30
143A (*b*)	Maintenance and renewal of machinery, tools and plant . . . . „	1st half	0·05	0·06	0·50	0·42	0·03	0·18	0·13	0·13	0·29	0·10	0·03
		2nd „	...	0·15	0·57	0·16	0·16	0·19	0·13	0·10	0·26	0·21	0·02
144*b*	Other charges (net) . „	1st half	0·26	1·20	1·04	0·33	0·83	1·01	2·11	0·57	1·26	1·53	1·10
		2nd „	...	1·30	0·92	0·22	0·80	0·92	1·48	0·45	1·71	0·70	0·61
145*b*	Total locomotive expenses . . . . . „	1st half	6·72	7·25	14·42	5·98	5·99	11·73	12·69	6·87	11·10	7·23	7·88
		2nd „	...	7·62	14·65	8·33	5·76	12·03	10·96	6·24	11·33	7·17	6·32
	Fuel consumed in terms of Coal (Kurhurbaree) . *lbs.*	1st half	34·55	56·22	47·45	42·12	53·18	49·70	50·47	50·93	46·53	45·44	40·33
		2nd „	...	53·45	47·11	41·93	50·24	47·81	50·42	46·42	47·61	45·04	34·06
	Wood . „	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd „	...	...	...	...	...	...	...	...	...	...	...

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these Statistics.

3′ 3¾″												4	2′ 6″			Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) and (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*).	21 (*a*) to (*f*)	22 (*a*) to (*f*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*c*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Noakhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Maharatta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Newshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
EXPENSES.																	
5·98	15·99	11·16	7·10	6·54	11·88		14·58	10·77	12·77	10·92	18·32	2·85	21·00	14·73	2·90	1st half	
6·01	15·71	11·18	7·49	4·77	14·15		15·02	7·68	12·82	10·84	20·02	2·50	21 00	14·21	2·50	2nd „	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	2nd „	
0·42	0·82	0·90	0·69	0·90	0·45		0·60	0·85	0·60	0·78	1·78	0·59	0·38	0·62	0·53	1st half	138*a*
0·45	0·90	0·92	0·54	1·20	0·39		0·65	0·87	0·60	0·75	1·70	1·06	0·58	0·58	0·54	2nd „	
0·81	1·18	2·66	1·17	1·45	0·78		1·72	0·76	1·54	1·76	0·91	1·31	2·25	1·30	1·12	1st half	139*a*
0 78	1·23	2·66	1·10	1·55	0·71		1·86	0 78	1 18	1·70	0·78	1 25	2·64	1·08	1·00	2nd „	
1·82	3·37	3·95	1·89	1·33	3·82		3·88	3·29	3·07	2·74	3·99	1·05	2·35	1·93	0·66	1st half	140*a*
1·52	3 17	3·68	2·09	1·38	4·47		3·69	2 40	2·96	2·73	4 35	0·82	3·41	1·81	0·42	2nd „	
0·16	0·17	0·32	0·16	0·16	0·34		0·28	0·17	0·20	0·22	0·23	0·28	2·51	0·64	0·34	1st half	141*a*
0·15	0·18	0·31	0·16	0 20	0 43		0·29	0·14	0·13	0·21	0·20	0·22	1·67	0·52	0·30	2nd „	
0·19	0·30	0 38	0·23	0·28	0·32		0·26	0·18	0·23	0·17	0·21	0·18	0·73	0·41	0·16	1st half	142*a*
0·20	0·32	0·37	0·25	0·24	0·32		0·28	0·28	0·23	0·17	0·23	0·24	0·78	0·36	0·15	2nd „	
0·97	1·43	1·78	2·64	0·69	1·44		2·11	1·14	3·90	2·28	2·76	1·47	2·51	1·62	0·25	1st half	143*a*
0·94	1·65	0·20	1·50	1·23	1·42		2·93	0·98	1·32	2·04	1·26	0·87	1·64	1·67	0·75	2nd „	
0·04	0·16	0·15	0·21	0·14	0·11		0·34	0·17	0·10	0·23	0·18	0·05	...	0·13	0·12	1st half	143 A (*a*)
0·05	0·10	2·86	0·22	0·15	0·10		0·42	0 14	0·09	0·21	0·21	0·01	0·06	0·18	—*0·10*	2nd „	
0·79	—*0·01*	0·60	1·72	1·08	0·57		0·71	0·41	0·22	0 95	...	3·44	0·61	0·25	1·58	1st half	144*a*
0·53	0 01	1·96	0·45	1·07	0 76		0·68	0·35	0·15	1·19	...	3·27	0·22	0 31	1·34	2nd „	
5·20	7·42	10·89	8·74	6·03	7·83	Included with the Assam-Bengal.	9·90	6·97	9·86	9·13	10·06	8·37	18·34	6·90	5·46	1st half	145*a*
4 62	7·56	12·06	6·31	7 02	8·60		10·80	5·89	7·06	9·00	5 73	7·74	16 00	6·51	4·40	2nd „	
42·56	29·47	49 61	37·22	39·14	45·06		37·26	42·78	33 72	35·15	25·80	52·01	74·49	18·33	31·97	1st half	
35·33	28·28	46·10	39·01	49 37	44 18		34·41	43·83	32·37	35·29	30·39	45·12	67·09	17·82	23·72	2nd „	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	2nd „	
0·34	0·74	0·71	0·54	0·83	0·42		0·51	0·68	0·54	0·68	1·07	0·50	0·85	0·50	0·52	1st half	138*b*
0·37	0·81	0·76	0·42	1·08	0·37		0 56	0·76	0·55	0·67	1·59	0·88	0 52	0·48	0·54	2nd „	
0·66	1·06	2·19	0·92	1·31	0·73		1·48	0·61	1·41	1·55	0·85	1·10	2·05	1·05	1·10	1st half	139 (*b*)
0·64	1·12	2·19	0 85	1·40	0·67		1·60	0 60	1·45	1·52	0·73	1·04	2·38	0·89	0·99	2nd „	
1·49	3·03	3·25	1·49	1·21	3·58		3 35	2·64	2·80	2·40	3·74	0·89	3·52	1 56	0·65	1st half	140*b*
1·25	2·89	3·04	1·61	1·23	4·21		3·18	1·93	2·72	2·45	4·07	0·69	7·58	1·48	0·42	2nd „	
0·13	0·15	0·26	0·12	0·15	0·32		0·24	0·14	0·18	0·19	0·22	0·23	2·29	0·52	0·33	1st half	141*b*
0·12	0·16	0·25	0 12	0 18	0·40		0·25	0·11	0 11	0·19	0 19	0·19	1 51	0 42	0·30	2nd „	
0·16	0·27	0·31	0·18	0·25	0·30		0·23	0·15	0 21	0·15	0 19	0·15	0·66	0·33	0·16	1st half	142*b*
0·16	0·29	0·30	0·20	0·21	0·30		0·24	0·17	0·22	0·15	0 22	0·20	0 71	0·29	0·15	2nd „	
0·80	1·29	1·42	2·08	0·62	1·86		1·82	0·92	3·55	1 99	2·58	1·24	2·29	1·31	0·93	1st half	143*b*
0·78	1·50	2·37	1·16	1·10	1·34		2·52	0·81	1 21	1·83	1·18	0·73	1·48	1·37	0·73	2nd „	
0·03	0·15	0·12	0·19	0·13	0·10		0·30	0·13	0 09	0·20	0·17	0·04	...	0·11	0·12	1st half	143 A (*b*)
0·04	0·09	0·17	0·17	0 14	0·09		0·37	0·11	0 08	0·19	0 20	...	0 05	0·15	—*0·10*	2nd „	
0·64	—*0·01*	0·49	1·36	0·98	0·53		0·62	0·33	0·21	0·83	...	2·90	0·56	0·20	1·55	1st half	144*b*
0·44	0·01	0·37	0·35	0·96	0·72		0·59	0·24	0·14	1·07	...	2·73	0 21	0·26	1·31	2nd „	
4·25	6·68	8·78	6·88	5·48	7·34		8·55	5·60	8·99	7·99	9·42	7·05	16·72	5·58	5 36	1st half	145*b*
3·80	6 87	9·95	4·88	6·30	8·10		9·31	4·73	6·48	8·07	8·18	6·46	14·44	5·34	4·34	2nd „	
34·83	26·57	40·78	29·27	35·55	42·22		32·18	34 36	30·73	30·76	27·50	43·78	67·39	14·82	31·40	1st half	
29·05	25·69	38·03	30·13	36 25	41·62		29·64	35·25	29·68	31·64	28 46	38·50	60·53	14·62	23·41	2nd „	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	2nd „	

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″											
		Number.		1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	PER 1,000 GROSS TON-MILES.									TABLE B.—LOCOMOTIVE			
138c	General superintendence (including office expenses) . . *Rs.*	1st half	0·15	0·13	0·16	0·12	0·09	0·11	0·11	0·14	0·10	0·11	0·39
		2nd ,,	...	0·21	0·18	0·13	0·10	0·13	0·11	0·14	0·11	0·13	0·31
139c	Running expenses . . ,,	1st half	0·35	0·37	0·47	0·43	0·28	0·50	0·35	0·30	0·26	0·23	0·64
		2nd ,,	...	0·44	0·50	0·43	0·29	0·54	0·37	0·32	0·28	0·23	0·51
140c	Fuel . . . . . ,,	1st half	0·63	0·23	1·07	0·51	0·12	0·82	0·35	0·38	0·90	0·62	1·03
		2nd ,,	...	0·21	0·99	0·66	0·13	0·84	0·30	0·32	0·29	0·70	0·76
141c	Water . . . . . ,,	1st half	0·05	0·03	0·08	0·04	0·01	0·06	0·06	0·04	0·04	0·03	0·08
		2nd ,,	...	0·03	0·08	0·04	0·02	0·06	0·05	0·04	0·04	0·03	0·06
142c	Oil, tallow and other stores . ,,	1st half	0·09	0·05	0·07	0·02	0·04	0·07	0·06	0·07	0·05	0·06	0·11
		2nd ,,	...	0·06	0·08	0·06	0·05	0·09	0·06	0·06	0·06	0·05	0·09
143c	Maintenance and renewal of locomotives . . . ,,	1st half	0·94	0·33	0·58	0·36	0·33	0·62	0·35	0·33	0·57	0·28	0·86
		2nd ,,	...	0·39	0·79	1·50	0·27	0·72	0·59	0·29	0·50	0·38	0·51
143 A(c)	Maintenance and renewal of machinery, tools and plant ,,	1st half	0·02	0·01	0·09	0·12	0·01	0·04	0·03	0·03	0·06	0·02	0·02
		2nd ,,	...	0·03	0·11	0·05	0·03	0·04	0 03	0·02	0·05	0·05	...
144c	Other charges (net) . . ,,	1st half	0·09	0·23	0·20	0·09	0·14	0·21	0·46	0·10	0·25	0·36	0·50
		2nd ,,	...	0·28	0·18	0·08	0·14	0·20	0·33	0·10	0·36	0·17	0·24
145c	Total locomotive expenses . ,,	1st half	2·32	1·38	2·72	1·69	1·02	2·43	2·77	1·34	2·23	1·71	3·63
		2nd ,,	...	1·65	2·91	2·95	1·03	2·62	2·34	1 29	2·39	1·74	2·46
	Fuel consumed in terms of Coal (Kurharbaree). *lbs.*	1st half	191·04	171·84	143·47	190·96	145·85	164·63	175·97	155·54	149·85	171·08	297·01
		2nd ,,	...	185·37	149·51	237·46	145·68	166·70	177·30	153·60	160·95	175·21	214·20
	Wood . ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
	PER TOTAL TRAIN-MILE.									TABLE C.—CARRIAGE AND			
146a	General superintendence (including office expenses) . *Annas*	1st half	0·27	0·18	0·40	0·46	0·19	0·19	0·24	0·22	0·09	0·18	0·33
		2nd ,,	...	0·24	0·41	0·31	0·20	0·22	0·26	0·19	0·09	0·23	0·31
147a	Repairs and renewals of coaching vehicles . ,,	1st half	1·04	0·97	1·96	2·41	0·85	1·04	0·93	0·87	0·70	0·67	0·90
		2nd ,,	...	1·26	1·85	1·18	2·97	1·36	0·92	0·53	0·64	0·68	0·81
148a	Repairs and renewals of goods vehicles . ,,	1st half	0·75	0·71	2·46	1·62	0·89	1·22	2·26	0·94	0·84	0·87	1·46
		2nd ,,	...	0·63	1·78	1·54	0·91	1·32	2·95	1 07	0·87	0·29	0·98
148A (a)	Repairs and renewals of machinery, tools and plant ,,	1st half	—*0·01*	0·02	0·19	0·06	0·11	0·09	0·10	0·04	0·02	0·03	0·02
		2nd ,,	...	0·05	0·16	0·03	0·07	0·10	0·12	0·03	0·04	0·05	0·02
149a	Cleaning and oiling . . ,,	1st half	0·44	0·54	0·51	0·32	0·21	0·45	0·33	0·40	0·30	0·37	0·22
		2nd ,,	...	0·47	0·49	0·23	0·22	0·50	0·33	0·34	0·31	0·32	0·23
150a	Other charges (net) . . ,,	1st half	...	0·02	0·03	0·02	0·03	0·02	0·53	0·01	0·04	0·01	—*0·02*
		2nd ,,	...	0·07	0·20	0·01	0·02	0·01	0·79	...	0·07	0·04	...
151a	Total carriage and wagon expenses . . . . ,,	1st half	1·63	2·44	5·55	4·89	2·28	3·01	4·44	2·48	1·99	1·63	2·91
		2nd ,,	...	2·72	4·89	3·30	4·39	3·51	5·37	2·16	2·02	1·61	2·35
	PER 1,000 VEHICLE-MILES RUN BY HOME VEHICLES.												
146b	General superintendence (including office expenses) . . *Rs.*	1st half	1·32	0·38	0·95	1·45	0·41	0·63	0·77	0·48	0·27	0·41	1·19
		2nd ,,	...	0·61	1·09	0·95	0·46	0·78	0·78	0·45	0·28	0·63	1 00
147b	Repairs and renewals of coaching vehicles calculated on coaching vehicle mileage. ,,	1st half	4·67	2·05	13·08	16·52	7·61	11·30	8·93	8·54	6·44	5·31	6·69
		2nd ,,	...	13·14	11·41	9·27	24·83	12·41	8·37	5·37	5·37	5·14	6·47
148b	Repairs and renewals of goods vehicles calculated on goods vehicle mileage. ,,	1st half	4·53	1·51	9·26	9·58	2·52	5·96	10·35	2·70	3·63	1·19	9 96
		2nd ,,	...	2·15	8·12	7·74	2·81	7·76	13·57	5·63	4·31	1·27	5·14
148A (b)	Repairs and renewals of machinery, tools and plant . ,,	1st half	—*0·06*	0·05	0·47	0·18	0·23	0·30	0·30	0·09	0·07	0·06	0·04
		2nd ,,	...	0·13	0·42	0·07	0·15	0·37	0·35	0·07	0·12	0·15	0·05
149b	Cleaning and oiling . . . ,,	1st half	2·17	1·14	1·22	1·02	0·46	1·52	1·04	0·90	0·88	0·87	0·78
		2nd ,,	...	1·22	1·29	0·71	0·49	1·77	1·02	0·82	0·99	0·90	0·71
150b	Other charges (net) . . . ,,	1st half	...	0·05	0·08	0·06	0·06	0·07	1·66	0·01	0·11	0·03	—*0·07*
		2nd ,,	...	0·16	0·53	0·03	0·05	0·05	2·43	...	0·21	0·12	0·02
151b	Total carriage and wagon expenses . . . . ,,	1st half	8·06	5·18	13·37	15·51	4·92	10·14	13·97	5·50	5·86	3·75	10·33
		2nd ,,	...	7·02	12·85	10·10	9·92	12·55	16·39	5·14	6·30	4·50	7·45

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge. Number.	Serial number.
12 (a) & (b) Bengal and North-Western.	14 (a) to (d) Bhavnagar-Gondal-Junagad-Porbandar.	15 (a) Burma.	3 (b) & (c) Eastern Bengal.	8 (c) Hyderabad-Godavari Valley.	18 (a) to (c) Jodhpur-Bikaner.	11 (b) Noakhali (Bengal).	2 (g) to (m) Rajputana-Malwa.	20 (a) & (b) Rohilkund and Kumaon.	21 (a) to (f) South Indian.	22 (a) to (j) Southern Mahratta.	23 (a) Udaipur-Chitor.	1 (b) Jubbulpore-Gondia extension.	30 (a) Kalka-Simla.	9 (g) & (h) Khushalgarh-Kohat-Thal and Nowshera-Durgai.	1 (e) Raipur-Dhamtari.	Calendar year 1905 by half-years.	
EXPENSES—*concld.*																	
0·12	0·26	0·26	0·23	0·28	0·13		0·15	0·30	0·20	0·26	0·59	0·20	0·34	0·53	0·35	1st half	138a
0·14	0·32	0·28	0·16	0·40	0·12		0·18	0·31	0·21	0·26	0·54	0·36	0·45	0·61	0·47	2nd ,,	
0·23	0·39	0·76	0·33	0·44	0·23		0·45	0·27	0·52	0·58	0·30	0·46	2·02	1·11	0·74	1st half	139a
0·23	0·45	0·80	0·32	0·52	0·21		0·51	0·26	0·54	0·59	0·26	0·43	2·01	1·14	0·85	2nd ,,	
0·51	1·14	1·14	0·62	0·41	1·14		1·00	1·14	1·04	0·91	1·36	0·38	3·38	1·63	0·44	1st half	140a
0·46	1·15	1·11	0·61	0·46	1·34		1·02	0·81	1·01	0·94	1·39	0·28	6·43	1·90	0·36	2nd ,,	
0·05	0·06	0·09	0·05	0·05	0·10		0·07	0·06	0·07	0·07	0·08	0·10	2·25	0·53	0·23	1st half	141a
0·05	0·07	0·09	0·05	0·06	0·13		0 08	0·05	0·04	0·07	0·07	0·08	1·28	0·54	0·26	2nd ,,	
0·05	0·10	0·11	0·08	0·08	0·09		0·07	0·06	0·07	0·06	0 07	0·06	0·65	0·35	0·11	1st half	142a
0·06	0·12	0·11	0·07	0·08	0·10		0·08	0·08	0·08	0·06	0·07	0·08	0·60	0·37	0·12	2nd ,,	
0·28	0·49	0·50	0·86	0·22	0·43		0·55	0·40	1·32	0·76	0·93	0·52	2·25	1·39	0·62	1st half	143a
0·28	0·60	0·87	0·44	0·41	0·43		0·30	0·34	0·45	0·71	0·39	0·30	1·25	1·75	0·64	2nd ,,	
0·01	0·06	0·04	0·08	0·04	0·04		0·09	0·05	0·03	0·07	0·06	0·02	...	0·11	0·08	1st half	143
0·02	0·04	0·06	0·06	0·05	0·03		0·12	0·05	0·03	0·07	0·07	...	0·04	0·19	—*0·08*	2nd ,,	A(c)
0·22	—*0·01*	0·17	0·56	0·33	0·17		0·18	0·14	0·08	0·32	...	1·20	0·55	0·21	1·05	1st half	144a
0·15	...	0·34	0·12	0·37	0·23		0·18	0·10	0·05	0·41	...	1·12	0·18	0·33	1·14	2nd ,,	
1·47	2·51	3·07	2·86	1·85	2·33		2·56	2·43	3·23	3·03	3·39	2·94	16·44	5·90	3·62	1st half	145a
1·39	2·75	3·64	1·83	2·35	2·59		2·97	2·00	2·41	3·11	2·79	2·65	12·24	6·83	3·76	2nd ,,	
192·18	159·68	227·97	194·76	192·23	214·49	Included with the Assam-Bengal.	154·34	237·40	182·07	186·69	149·57	291·69	1,068·18	250·96	339·35	1st half	
170·21	164·69	232·52	181·08	216·00	212·89		151·63	237·81	176·99	194·93	155·43	252·34	821·08	299 10	324·00	2nd ,,	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	1st half	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	2nd ,,	
WAGON EXPENSES.																	
0·15	0·24	0·26	0·26	0·12	0·16		0·23	0·39	0·20	0·24	0·45	0·13	0·27	0·08	0·12	1st half	146a
0·16	0·26	0·27	0·26	0·15	0·14		0·26	0·39	0·20	0·23	0·49	0·25	0·58	0·05	0·13	2nd ,,	
0·38	0·33	0·66	1·15	0·24	0·56		1·11	0·84	0·69	0·96	0·23	0·68	0·46	0·23	0·10	1st half	147a
0·39	1·05	0·76	0·87	0·32	0·48		1·30	0·54	0·58	0·87	0·36	1·78	1·99	0·40	0 50	2nd ,,	
0·44	0·98	0·85	—*0·85*	0·23	0·30		1·40	0·56	0·38	0·98	0·04	0·18	0·27	0·45	0·12	1st half	148a
0·40	1·59	1·13	0·20	0·25	0·37		1·37	0·44	1·04	0·76	0·22	0·39	0·39	0·17	0·14	2nd ,,	
0·02	0·03	0·06	0·04	0·03	0·04		0·11	0·05	0·03	0·05	0·03	...	0·21	0·01	...	1st half	148
0·03	0·05	0·06	0·03	0·02	0·04		0·10	0·05	0·03	0·04	0·02	0·01	0·04	...	0·02	2nd ,,	A(a)
0·29	0·21	0·28	0·32	0·13	0·23		0·29	0·27	0·29	0·19	0·50	0·49	0·73	0·51	0·31	1st half	149a
0·31	0·24	0·27	0·31	0·23	0·20		0·31	0·32	0·25	0·19	0·49	0·45	0·43	0·44	0·23	2nd ,,	
0·01	...	0·02	0·03	0·01	0·01		0·02	...	—*0·04*	0·01	...	0·02	0·01	0·04	0·03	1st half	150a
0·02	...	0·03	0·03	...	0·01		—*0·29*	...	—*0·04*	0·01	0·01	0·10	—*0·98*	0·07	0·03	2nd ,,	
1·29	1·84	2·13	0·95	0·81	1·30		3·16	2·11	2·05	2·43	1·30	1·50	1·94	1·02	0·68	1st half	151a
1·31	3·19	2·52	1·71	0 97	1·24		3·05	1·74	2·06	2·08	1·50	2·98	2·45	1·13	1·04	2nd ,,	
0·35	0·62	0·67	0·77	0·37	0·45		0·50	1·02	0·62	0·67	1·18	0·36	2·47	0·47	0·46	1st half	146b
0·40	0·63	0·72	0·74	0·53	0·41		0·82	1·01	0·65	0·66	1·06	0·75	4·49	0·81	0·78	2nd ,,	
2·29	1·66	4·38	3·41	2·57	3·28		3·27	6·04	4·14	3·58	1·18	1·96	4·25	3·98	0·38	1st half	147b
2·13	4·66	5·47	5·59	2·67	2·82		3·00	3·51	3·75	7·17	1·42	12·35	15·47	5·18	7·17	2nd ,,	
1·64	5·42	3·32	—2·53	1·05	1·68		4·43	2·35	5·64	3·98	0·30	0·54	2·57	5·37	0·44	1st half	148b
1·75	10·41	4·95	0·99	1·50	2·02		5·46	2·02	6·85	3·25	1·88	2·07	3 01	1·94	1·36	2nd ,,	
0·05	0·20	0·14	0·13	0·11	0·12		0·25	0·12	0·10	0·14	0·07	...	1·99	0·07	0·01	1st half	148
0·07	0·14	0·16	0·10	0·06	0·10		0·24	0·13	0·10	0·12	0·04	0·04	0·30	0·02	0·10	2nd ,,	A(b)
0·65	0·54	0·71	0·96	0·57	0·66		0·65	0·70	0·91	0·54	1·33	1·43	6·75	2·92	1·13	1st half	149b
0·74	0·63	0·74	0·87	0·77	0·56		0·75	0·85	0·83	0·53	1·30	1·37	3·38	2·64	1·28	2nd ,,	
0·03	—*0·01*	0·05	0·09	0·01	0·02		0·04	...	—*0·14*	0·03	...	0·06	0·03	0·21	0·13	1st half	150b
0·04	...	0·07	0·09	0·03	0·02		—*0·70*	6·02	—*0·14*	—*0·03*	0·08	0·33	—*7·62*	0·40	0·17	2nd ,,	
2·97	4·80	5·43	2·53	2·57	3·72		7·06	5·56	6·36	6·79	3·76	4·35	18·06	10·92	2·55	1st half	151b
3·17	8·43	6·85	4·78	3·37	3·50		7·37	4·68	6·73	5·86	5·73	9·06	19·06	6·81	6·05	2nd ,,	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number		1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	PER TOTAL TRAIN-MILE.												**TABLE D—TRAFFIC**
152a	General superintendence (including office expenses) . . *Annas*	1st half	1·07	0·89	0·90	1·39	0·85	0·50	0·78	0·60	0·50	0·74	0·94
		2nd ,,	...	1·01	0·85	1·16	0·86	0·57	0·84	0·55	0·43	0·74	0·88
153a	Station staff . . . . ,,	1st half	3·22	2·23	3·33	6·45	2·79	2·04	2·11	1·93	2·12	2·63	2·29
		2nd ,,	...	2·18	3·20	5·58	2·89	2·19	2·15	1·85	2·01	2·67	2·91
154a	Train staff . . . . . ,,	1st half	0·55	0·70	0·87	1·18	1·14	1·30	0·67	0·71	0·80	0·82	0·69
		2nd ,,	...	0·69	0·85	0·98	1·16	1·38	0·70	0·68	0·74	0·87	0·68
155a	Fuel, lighting, water and general stores . . . . ,,	1st half	0·46	0·52	0·73	0·97	0·69	0·62	0·50	0·49	0·53	0·54	0·54
		2nd ,,	...	0·38	0·89	1·14	0·60	0·83	0·39	0·35	0·53	0·51	0·44
156a	Clothing . . . . . ,,	1st half	0·02	0·05	0·12	0·10	0·06	0·07	0·03	0·01	0·04	0·16	0·12
		2nd ,,	...	0·02	0·09	0·09	0·05	0·07	0·05	0·05	0·10	0·17	0·02
157a	Printing, stationery and tickets . . . . ,,	1st half	0·41	0·18	0·48	0·40	0·25	0·17	0·41	0·27	0·15	0·26	0·26
		2nd ,,	...	0·25	0·59	0·37	0·31	0·20	0·41	0·25	0·14	0·34	0·27
158a	Charges for delivery and collection of goods, etc. . ,,	1st half	...	...	...	0·03	0·01	0·01	0·01	...	...	0·02	...
		2nd ,,	...	...	...	0·02	0·01	0·01	0·02	...	...	0·01	...
159a	Miscellaneous expenses . ,,	1st half	0·03	0·01	0·03	0·03	0·02	0·01	0·05	0·01	0·01	...	0·02
		2nd ,,	...	...	0·02	0·03	0·03	0·02	0·06	0·01	...	0·08	0·01
160a	Payments to other lines . ,,	1st half	0·53	0·63	0·13	...	0·08	0·11	0·04	0·30	0·35	0·21	...
		2nd ,,	...	1·01	0·12	...	0·08	0·10	0·04	0·42	0·03	0·23	...
161a	Other charges (net) . . ,,	1st half	...	0·01	0·01	0·02	0·01	0·02	0·05	0·02	0·02	0·01	0·01
		2nd ,,	...	0·01	0·03	...	0·01	0·02	0·05	0·01	0·03	0·02	...
162a	Total traffic expenses . ,,	1st half	6·29	5·22	6·60	10·57	5·90	4·85	4·70	4·34	4·22	5·39	4·87
		2nd ,,	...	5·50	6·64	9·37	5·91	5·39	4·71	4·17	4·01	5·64	5·21
	PER CENT ON TRAFFIC EARNINGS. *(Abstracts H and I of Revenue Accounts.)*												
152b	General superintendence (including office expenses) . *Per cent.*	1st half	2·32	1·27	0·86	2·31	1·10	0·72	1·24	0·78	0·83	1·52	2·81
		2nd ,,	...	1·65	0·91	1·55	1·18	0·94	1·35	0·80	0·77	1·68	2·38
153b	Station staff . . . . ,,	1st half	6·96	3·17	3·18	10·71	3·59	2·90	3·32	2·53	3·52	5·39	6·82
		2nd ,,	...	3·48	3·43	7·48	3·82	3·59	3·46	2·68	3·61	6·00	7·80
154b	Train staff . . . . ,,	1st half	1·19	0·99	0·83	1·86	1·46	1·85	1·05	0·93	1·32	1·67	2·07
		2nd ,,	...	1·12	0·92	1·31	1·59	2·27	1·14	0·99	1·32	1·95	1·82
155b	Fuel, lighting, water and general stores . . . ,,	1st half	0·99	0·74	0·70	1·62	0·88	0·88	0·79	0·65	0·87	1·10	1·60
		2nd ,,	...	0·61	0·95	1·53	0·82	1·36	0·64	0·52	0·96	1·16	1·17
156b	Clothing . . . . . ,,	1st half	0·05	0·08	0·12	0·16	0·08	0·10	0·12	0·01	0·06	0·33	0·35
		2nd ,,	...	0·04	0·10	0·12	0·07	0·11	0·08	0·07	0·18	0·39	0·04
157b	Printing, stationery and tickets . . . . ,,	1st half	0·89	0·26	0·46	0·67	0·32	0·24	0·65	0·35	0·25	0·52	0·77
		2nd ,,	...	0·40	0·64	0·50	0·42	0·34	0·65	0·37	0·27	0·69	0·72
158b	Charges for delivery and collection of goods, etc. ,,	1st half	...	0·01	...	0·05	0·01	0·02	0·02	...	...	0·04	...
		2nd ,,	...	0·01	...	0·02	0·01	0 02	0·03	...	..	0·04	...
159b	Miscellaneous expenses . ,,	1st half	0·06	0·02	0·03	0·05	0·02	0·02	0·08	0·02	0·01	0·01	0·06
		2nd ,,	...	0·01	0·02	0·04	0·04	0·03	0·09	0·02	0·01	0·19	0·04
160b	Payments to other lines . ,,	1st half	1·15	0·89	0·13	...	0·10	0·16	0·07	0·39	0·09	0·43	...
		2nd ,,	...	1·63	0·13	...	0·12	0 16	0·07	0·60	0·05	0·53	...
161b	Other charges (net) . ,,	1st half	...	0·01	0·01	0·02	0·02	0·02	0·07	0·02	0·04	0·02	0·02
		2nd ,,	...	0·02	0·03	0·01	0·01	0 03	0·09	0·01	0·05	0·06	0·01
162b	Total traffic expenses . ,,	1st half	13·61	7·44	6·32	17·55	7·58	6·91	7·41	5·63	6·99	11·06	14·50
		2nd ,,	...	8·97	7·13	12·56	8·08	8·85	7·60	6·06	7·22	12·69	13·98
	General superintendence per cent on traffic earnings (including steamboat) . . . . *Per cent.*	1st half	2·32	1·27	0·86	2·31	1·09	0·72	1·24	0·78	0·83	1·52	2·81
		2nd ,,	...	1·65	0·91	1·55	1·17	0·94	1·35	0·80	0·84	1·68	2·31

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

8′ 3″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) & (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) & (*h*)	1 (*c*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal-Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal).	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera-Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
EXPENSES.																	
0·62	0·84	0·88	1·23	0·57	0·62		0·51	0·81	0·70	0·61	1·65	1·13	1·36	0·47	...	1st half	152*a*
0·62	0·87	0·87	0·96	0·73	0·57		0·53	0·85	0·66	0·60	1·66	1·09	1·40	0·50	...	2nd „	
1·67	2·31	2·13	2·63	1·47	1·21		1·90	1·54	1·74	1·49	2·15	1·87	2·86	1·90	1·59	1st half	153*a*
1·74	2·28	2·14	2·82	1·92	1·16		1·99	1·64	1·67	1·46	1·87	1·98	2·87	1·52	1·27	2nd „	
0·47	0·43	0·70	0·69	0·61	0·25		0·50	0·36	0·42	0·53	0·26	0·65	0·77	0·64	0·40	1st half	154*a*
0·48	0·46	0·74	0·64	0·71	0·24		0·53	0·38	0·40	0·52	0·28	0·65	0·91	0·56	0·39	2nd „	
0·49	0·59	0·51	0·48	0·42	0·37		0·42	0·45	0·51	0·31	0·16	0·27	0·41	0·55	...	1st half	155*a*
0·51	0·58	0·55	0·69	0·39	0·52		0·55	0·50	0·45	0·33	0·19	0·16	0·30	0·59	...	2nd „	
0·07	0·05	0·06	0·04	...	0·04		0·07	0·03	...	0·07	0·01	0·08	0·11	0·23	...	1st half	156*a*
0·06	0·05	0·14	0·07	0·06	0·02		0·06	0·06	0·01	0·09	0·09	...	0·11	0·09	...	2nd „	
0·22	0·55	0·34	0·24	0·23	0·24		0·28	0·24	0·30	0·24	0·52	0·11	0·50	0·15	0·07	1st half	157*a*
0·18	0·57	0·23	0·29	0·25	0·20		0·37	0·35	0·30	0·20	0·47	0·12	0·88	0·17	0·07	2nd „	
...	...	0·02	...	...	...		...	...	...	...	...	...	0·08	...	...	1st half	158*a*
...	...	0·02	...	...	...		...	...	...	...	...	...	0·08	...	...	2nd „	
0·03	0·03	0·02	0·01	0·01	...		0·02	0·04	0·01	0·02	0·03	0·02	0·04	0·01	0·02	1st half	159*a*
0·06	0·03	0·02	...	0·02	...		0·02	0·03	0·04	0·02	0·03	0·01	0·03	...	0·01	2nd „	
0·09	0·23	...	...	0·21	0·23		0·07	0·34	0·07	0·20	0·35	...	0·19	...	...	1st half	160*a*
0·10	0·23	...	...	0·42	0·23		0·07	0·17	0·07	0·21	0·41	...	0·20	...	...	2nd „	
0·05	0·01	0·03	0·07	0·01	...		...	0·01	...	0·03	...	0·01	0·01	0·02	0·03	1st half	161*a*
0·07	0·01	0·02	0·07	0·01	...		0·02	...	...	0·03	...	...	0·01	0·03	...	2nd „	
3·71	5·04	4·64	5·39	3·53	2·96		3·77	3·82	3·75	3·50	5·13	4·14	6·33	3·97	2·10	1st half	162*a*
3·82	5·08	4·78	5·54	4·51	2·94		4·14	3·98	3·60	3·46	5·00	4·01	6·79	3·46	1·74	2nd „	
1·40	1·26	1·45	2·48	1·08	1·24	Included with the Assam-Bengal.	0·86	1·75	1·38	1·37	2·79	3·48	2·22	2·69	...	1st half	152*b*
1·57	1·55	1·88	1·62	1·67	1·10		0·92	1·75	1·45	1·51	2·65	3·08	1·70	3·17	...	2nd „	
3·78	3·45	3·73	5·30	2·79	2·41		3·17	3·88	3·45	3·37	3·62	5·73	4·66	10·74	4·94	1st half	153*b*
4·45	4·05	4·61	4·77	4·40	2·23		3·44	3·39	3·62	3·70	2·97	5·56	3·46	9·70	6·02	2nd „	
1·05	0·64	1·22	1·40	1·15	0·50		0·83	0·78	0·83	1·21	0·44	2·00	1·25	3·64	1·23	1st half	154*b*
1·21	0·82	1·60	1·08	1·63	0·45		0·92	0·79	0·88	1·33	0·46	1·81	1·10	3·55	1·85	2nd „	
1·11	0·88	0·89	0·96	0·79	0·73		0·70	0·99	1·01	0·70	0·27	0·84	0·67	3·12	...	1st half	155*b*
1·30	1·03	1·18	1·17	0·89	1·00		0·95	1·03	0·98	0·84	0·30	0·46	0·36	3·76	...	2nd „	
0·16	0·08	0·11	0·09	0·01	0·07		0·12	0·07	0·01	0·16	0·01	0·24	0·18	1·30	...	1st half	156*b*
0·14	0·08	0·30	1·11	0·13	0·05		0·09	0·13	0·02	0·23	0·14	0·01	0·14	0·58	...	2nd „	
0·49	0·83	0·59	0·47	0·43	0·48		0·46	0·52	0·59	0·54	0·38	0·34	0·31	0·86	0·20	1st half	157*b*
0·46	1·01	0·60	0·50	0·58	0·38		0·64	0·73	0·65	0·50	0·75	0·33	1·06	1·09	0·32	2nd „	
...	...	0·04	...	...	...		...	...	...	...	...	...	0·13	...	...	1st half	158*b*
...	...	0·04	...	...	...		...	...	...	...	...	...	0·10	...	...	2nd „	
0·07	0·04	0·04	0·02	0·02	...		0·03	0·08	0·02	0·05	0·06	0·06	0·06	0·04	0·07	1st half	159*b*
0·16	0·05	0·05	0·01	0·04	...		0·03	0·06	0·08	0·05	0·05	0·03	0·03	0·02	0·05	2nd „	
0·20	0·34	...	...	0·41	0·46		0·12	0·75	0·15	0·46	0·59	...	0·31	...	...	1st half	160*b*
0·25	0·40	...	...	0·96	0·43		0·13	0·35	0·16	0·53	0·65	...	0·24	...	...	2nd „	
0·11	0·02	0·05	0·14	0·02	...		0·01	0·02	...	0·08	...	0·04	0·02	0·12	0·06	1st half	161*b*
0·18	0·08	0·05	0·11	0·02	...		0·03	0·01	...	0·07	...	...	0·01	0·20	...	2nd „	
8·37	7·54	8·12	10·86	6·70	5·89		6·30	8·34	7·44	7·94	8·66	12·73	10·31	22·51	6·50	1st half	162*b*
9·72	9·02	10·31	9·37	10·32	5·64		7·15	8·24	7·84	8·76	7·97	11·30	8·20	22·07	8·24	2nd „	
1·30	1·26	1·45	2·30	1·08	1·24		0·86	1·75	1·38	1·37	2·79	3·48	2·22	2·69	...	1st half	
1·47	1·55	1·88	1·47	1·67	1·10		0·92	1·75	1·45	1·51	2·65	3·08	1·70	3·17	...	2nd „	

APPEN

Analysis of working of each railway

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5′ 6″										
		Number		1 (*a*)	2 (*a*) to (*f*)	3 (*a*)	4 (*a*) to (*d*)	5 (*a*) to (*f*)	6 (*a*) to (*c*)	8 (*a*) & (*b*)	9 (*a*) to (*f*)	10 (*a*) & (*b*)	11 (*a*)
		Calendar year 1905 by half years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand.	Assam-Bengal.
	PER TOTAL TRAIN-MILE.											TABLE E.—GENERAL	
163*a*	Home expenditure . . *Annas*	1st half	2·48	0·77	0·26	0·23	0·38	0·37	0·37	0·59	0·09	0·09	1·66
		2nd „	...	0·69	0·36	...	0·38	0·42	0·38	0·64	...	...	1·42
164*a*	Agent's office—salaries and expenses . . . . „	1st half	2·27	0·27	0·22	0·41	0·13	0·15	0·34	0·29	0·14	0·24	0·80
		2nd „	...	0·36	0·32	0·31	0·14	0·15	0·35	0·28	0·14	0·26	0·75
165*a*	Audit, accounts and pay office „	1st half	1·68	0·73	0·92	0·88	0·47	0·53	0·68	1·16	0·40	0·60	1·27
		2nd „	...	0·79	0·93	0·76	0·49	0·58	0·69	1·14	0·43	0·59	1·15
166*a*	Stores Department . . „	1st half	0·20	0·20	0·35	0·29	0·16	0·16	0·12	0·22	0·11	0·17	0·53
		2nd „	...	0·22	0·35	0·25	0·16	0·19	0·12	0·22	0·10	0·18	0·45
167*a*	Medical „ . . „	1st half	0·25	0·22	0·21	0·22	0·16	0·10	0·13	0·17	0·10	0·10	0·43
		2nd „	...	0·25	0·20	0·18	0·16	0·11	0·15	0·16	0·10	0·11	0·40
168*a*	Rents and miscellaneous . „	1st half	0·74	0·27	0·29	0·35	0·20	0·14	0·13	0·32	0·14	0·26	0·17
		2nd „	...	0·29	0·27	0·27	0·29	0·12	0·24	0·34	0·12	0·22	0·16
169*a*	Police . . . . . „	1st half	0·50	0·19	0·46	0·18	0·23	0·21	0·33	0·58	0·12	0·18	0·24
		2nd „	...	0·21	0·44	0·16	0·24	0·24	0·34	0·57	0·13	0·18	0·20
170*a*	Advertising . . . . . „	1st half	0·02	0·03	0·01	0·05	0·01	0·01	0·01	0·01	0·01	0·02	0·01
		2nd „	...	0·05	0·01	0·04	0·02	0·01	0·02	...	0·01	0·02	0·02
171*a*	Electric telegraph . . . „	1st half	1·02	0·86	1·16	0·96	0·76	0·67	0·73	0·63	0·60	0·65	1·24
		2nd „	...	1·00	1·18	0·81	0·77	0·72	0·82	0·61	0·64	0·67	1·11
172*a*	Other charges (net) . . „	1st half	...	...	...	0·01	0·01	0·01	0·14	...	...	...	...
		2nd „	...	...	...	0·01	0·02	0·01	0·19	...	0·05	0·01	0·01
173*a*	Total general charges . . „	1st half	9·16	3·54	3·88	3·53	2·51	2·35	2·98	3·97	1·71	2·30	6·35
		2nd „	...	3·86	4·06	2·79	2·67	2·55	3·30	3·96	1·71	2·24	5·67
	PER CENT ON TOTAL EARNINGS.												
163*b*	Home expenditure . . *Per cent.*	1st half	4·58	1·06	0·24	0·39	0·49	0·52	0·56	0·74	0·15	0·14	4·68
		2nd „	...	1·08	0·38	...	0·51	0·68	0·60	0·88	...	...	3·52
164*b*	Agent's office—salaries and expenses . . „	1st half	4·20	0·37	0·20	0·68	0·16	0·21	0·53	0·36	0·23	0·45	2·26
		2nd „	...	0·57	0·33	0·43	0·19	0·24	0·55	0·38	0·24	0·55	1·87
165*b*	Audit, accounts and pay office . . . . „	1st half	3·10	1·00	0·87	1·46	0·60	0·74	1·04	1·47	0·65	1·14	3·57
		2nd „	...	1·23	0·98	1·05	0·66	0·95	1·08	1·57	0·76	1·23	2·85
166*b*	Stores Department . . „	1st half	0·36	0·27	0·33	0·49	0·20	0·23	0·18	0·28	0·17	0·32	1·49
		2nd „	...	0·34	0·37	0·34	0·22	0·31	0·18	0·30	0·18	0·33	1·12
167*b*	Medical „ . . „	1st half	0·46	0·30	0·20	0·37	0·20	0·15	0·19	0·22	0·17	0·19	1·22
		2nd „	...	0·39	0·21	0·25	0·21	0·18	0·23	0·22	0·18	0·22	0·98
168*b*	Rents and miscellaneous „	1st half	1·37	0·37	0·27	0·53	0·26	0·20	0·19	0·40	0·23	0·49	0·49
		2nd „	...	0·45	0·29	0·37	0·39	0·20	0·33	0·47	0·21	0·45	0·39
169*b*	Police . . . . . „	1st half	0·92	0·26	0·43	0·30	0·23	0·30	0·52	0·72	0·19	0·34	0·68
		2nd „	...	0·34	0·47	0·22	0·32	0·38	0·54	0·78	0·23	0·38	0·49
170*b*	Advertising . . . . „	1st half	0·04	0·03	0·01	0·03	0·01	0·01	0·02	0·01	0·01	0·04	0·02
		2nd „	...	0·07	0·01	0·06	0·03	0·01	0·03	0·01	0·02	0·05	0·05
171*b*	Electric telegraph . . „	1st half	1·88	1·18	1·08	1·59	0·96	0·94	1·12	0·79	0·97	1·23	3·50
		2nd „	...	1·56	1·24	1·12	1·04	1·18	1·30	0·84	1·13	1·39	2·78
172*b*	Other charges (net) . „	1st half	...	...	...	0·02	0·02	0·01	0·21	...	0·01	...	...
		2nd „	...	...	...	0·01	0·03	0·02	0 30	...	0 08	0·02	0·01
173*b*	Total general charges . „	1st half	16·91	4·84	3·63	5·96	3·18	3·31	4·56	4·99	2·78	4 34	17·91
		2nd „	...	6·03	4·28	3·85	3·59	4·15	5·19	5·45	3·03	4·65	14·06
	PER CENT ON GROSS EARNINGS.											TABLE G—SPECIAL AND MISCEL	
174	Law charges . . . *Per cent.*	1st half	0·12	0·05	0·02	0·01	0·04	0·01	0·13	0·01	...	...	0·08
		2nd „	...	0·01	0·04	0·02	0·04	0·05	0·10	0 02	...	...	0·06
175	Compensation . . . „	1st half	0·85	1·06	0·06	0·42	0·09	0·23	0·33	0·01	0·09	0·09	0·05
		2nd „	...	—*0·16*	0·13	0·40	0·07	0 10	0·09	...	0·09	0·14	0·13
176	Rates and taxes . . „	1st half	0·33	0·12	0·12	0·26	0·16	0·09	0·10	0·03	0·09	0·08	0·13
		2nd „	...	0·13	0·13	0·20	0·15	0·11	0·26	0·12	0·10	0·04	0·07
177	Payments to other lines . „	1st half	5·17	1·32	0·15	0·17	1·29	0·80	0·89	0·34	0·38	1·12	0·38
		2nd „	...	0·39	0·17	1·75	0·47	0·94	0·77	0·48	0·24	2·20	0·47
178	Other charges (net) . „	1st half	1·01	1·03	0·48	1·21	0·34	0·86	1·17	1·35	0·73	0·90	4·95
		2nd „	...	1·66	0·85	0·98	0·26	1·24	1·27	1·08	0·94	1·08	4·51
179	Total special and miscellaneous expenses . „	1st half	7·48	3·58	0·83	2·07	1·92	1·99	2·62	1·74	1·29	2·19	5·59
		2nd „	...	3·03	1·32	3·35	0·99	2·44	2·49	1·70	1·37	3·46	5·24

DIX 18—*continued.*

(*by systems*) *during each half-year of 1905*—contd.

do not prepare these statistics.

3′ 3½″												2′ 6″				Gauge.	
12 (*a*) & (*b*)	14 (*a*) to (*d*)	15 (*a*)	3 (*b*) and (*c*)	8 (*c*)	18 (*a*) to (*c*)	11 (*b*)	2 (*g*) to (*m*)	20 (*a*) & (*b*)	21 (*a*) to (*f*)	22 (*a*) to (*j*)	23 (*a*)	1 (*b*)	30 (*a*)	9 (*g*) &(*h*)	1 (*e*)	Number.	Serial number.
Bengal and North-Western.	Bhavnagar-Gondal Junagad-Porbandar.	Burma.	Eastern Bengal.	Hyderabad-Godavari Valley.	Jodhpur-Bikaner.	Nowkhali (Bengal.)	Rajputana-Malwa.	Rohilkund and Kumaon.	South Indian.	Southern Mahratta.	Udaipur-Chitor.	Jubbulpore-Gondia extension.	Kalka-Simla.	Khushalgarh-Kohat-Thal and Nowshera Durgai.	Raipur-Dhamtari.	Calendar year 1905 by half-years.	
CHARGES.																	
0·51	0·13	0·70		0·58	...		0·15	0·96	0·74	0·70	...	2·65	0·03	0·09	1·17	1st half	163*a*
0·53	0·15	0·73		0·87	...		0·17	1·14	0·36	0·65	...	2·12	1·33	...	1·15	2nd „	
0·19	0·87	0·24		0·29	0·11		0·12	0·28	0·23	0·26	1·44	...	1·76	0·14	...	1st half	164*a*
0·17	1·08	0·24		0·38	0·10		0·20	0·27	0·21	0·25	1·41	...	1·99	0·14	...	2nd „	
0·58	1·50	0·56		1·15	0·56		0·53	0·68	0·72	0·69	1·09	...	2·31	0·40	...	1st half	165*a*
0·67	1·52	0·63		1·56	0·51		0·58	0·70	0·70	0·67	1·07	0·10	2·37	0·43	0·18	2nd „	
0·08	0·32	0·20		0·22	0·11		0·20	0·15	0·14	0·19	0·12	...	0·18	0·10	...	1st half	166*a*
0·09	0·34	0·20		0·29	0·10		0·21	0·16	0·17	0·19	0·11	0·01	0·14	0·10	...	2nd „	
0·10	0·39	0·21		0·25	0·09		0·12	0·10	0·22	0·14	0·24	...	0·35	0·17	...	1st half	167*a*
0·11	0·42	0·21		0·33	0·08		0·12	0·11	0·22	0·14	0·22	0·25	0·51	0·09	...	2nd „	
0·13	0·30	0·15		0·29	0·11		0·17	0·44	0·18	0·15	0·19	0·02	1·17	0·14	0·11	1st half	168*a*
0·11	0·32	0·16		0·41	0·11		0·17	0·31	0·23	0·13	0·24	0·03	0·90	0·13	0·05	2nd „	
0·21	0·96	0·39		0·43	0·09		0·26	0·34	0·23	0·26	...	0·07	0·26	0·59	0·31	1st half	169*a*
0·23	1·02	0·36		0·59	0·09		0·28	0·39	0·20	0·36	...	0·09	0·45	0·46	0·40	2nd „	
0·01	0·01	0·02		0·02	...		...	0·01	0·01	0·01	...	...	0·05	0·01	...	1st half	170*a*
0·01	0·01	0·01		0·01	...		...	0·02	0·01	0·02	...	...	0·03	0·01	...	2nd „	
0·56	1·17	0·69		0·57	0·86		0·66	0·69	0·86	0·87	0·96	1·44	0·65	0·89	0·60	1st half	171*a*
0·63	1·23	0·71		0·76	0·83		0·73	0·73	0·63	0·86	0·93	1·95	0·68	0·67	0·50	2nd „	
...	—*0·01*	0·13		0·03	...		...	...	0·01	...	...	...	0·02	...	...	1st half	172*a*
...	—*0·01*	0·02		0·05	...		...	...	0·01	0·01	...	...	...	0·05	...	2nd „	
2·37	5·64	3·29		3·83	1·93		2·21	3·65	3·14	3·37	4·06	4·18	6·70	2·53	2·19	1st half	173*a*
2·54	6·08	3·27		5·25	1·82		2·46	3·83	3·07	3·28	3·98	4·55	5·60	2·03	2·28	2nd „	
1·05	0·19	1·21		1·08	...		0·24	1·98	1·45	1·57	...	7·98	0·05	0·52	3·53	1st half	1635
1·22	0·26	1·57		1·93	...		0·29	2·26	0·78	1·62	...	5·68	1·57	...	5·16	2nd „	
0·39	1·27	0·41		0·53	0·21		0·20	0·58	0·44	0·57	2·38	...	2·81	0·77	...	1st half	1645
0·49	1·87	0·51		0·84	0·18		0·33	0·54	0·46	0·62	2·22	...	2·35	0·87	...	2nd „	
1·19	2·19	0·95		2·13	1·08		0·87	1·40	1·41	1·51	1·81	...	3·69	2·23	...	1st half	1655
1·57	2·63	1·32		3·44	0·96		0·98	1·41	1·49	1·67	1·88	0·29	2·80	2·68	0·83	2nd „	
0·17	0·46	0·35		0·40	0·20		0·33	0·32	0·28	0·42	0·20	...	0·26	0·59	...	1st half	1665
0·20	0·50	0·42		0·65	0·20		0·37	0·32	0·36	0·48	0·18	0·03	0·17	0·62	...	2nd „	
0·21	0·57	0·36		0·46	0·18		0·20	0·21	0·43	0·32	0·40	...	0·56	0·94	...	1st half	1675
0·25	0·72	0·44		0·74	0·16		0·21	0·21	0·47	0·35	0·34	0·69	0·60	0·58	...	2nd „	
0·27	0·44	0·26		0·54	0·20		0·27	0·91	0·35	0·33	0·32	0·05	1·87	0·77	0·31	1st half	1685
0·26	0·54	0·34		0·91	0·20		0·29	0·63	0·49	0·33	0·37	0·09	1·06	0·85	0·22	2nd „	
0·44	1·41	0·67		0·80	0·18		0·43	0·72	0·44	0·80	...	0·22	0·81	3·32	0·93	1st half	1695
0·50	1·78	0·76		1·31	0·17		0·46	0·78	0·42	0·89	...	0·25	0·53	2·93	1·80	2nd „	
0·01	0·01	0·03		0·03	0·01		0·01	0·02	0·02	0·01	...	...	0·09	0·03	...	1st half	1705
0·02	0·02	0·03		0·01	...		0·01	0·03	0·03	0·06	...	...	0·04	0·07	...	2nd „	
1·16	1·72	1·19		1·04	1·68		1·08	1·42	1·30	1·94	1·62	4·26	1·04	4·97	1·81	1st half	1715
1·47	2·13	1·50		1·67	1·54		1·24	1·46	1·55	2·13	1·46	5·39	0·79	4·22	2·25	2nd „	
...	—*0·01*	0·23		0·07	...		...	...	0·02	0·01	...	...	0·03	0·02	...	1st half	1725
...	—*0·02*	0·04		0·11	...		...	...	0·02	0·01	...	...	...	0·39	...	2nd „	
4·89	8·25	5·66		7·08	3·74		3·63	7·36	6·14	7·51	6·73	12·61	10·71	14·16	6·58	1st half	1735
5·89	10·52	6·93		11·61	3·41		4·18	7·64	6·57	8·16	6·25	12·62	6·60	13·13	10·26	2nd „	
LANEOUS EXPENSES.																	
0·02	...	0·02		0·01	...		0·02	0·03	...	—*0·03*	...	...	0·09	...	...	1st half	174
0·05	0·01	0·03		0·06	...		0·04	...	0·01	0·01	...	...	0·16	...	...	2nd „	
0·03	0·03	0·03		0·02	0·01		0·06	0·08	0·03	0·05	0·03	0·03	0·09	0·06	0·01	1st half	175
0·04	0·04	0·07		0·01	0·09		0·13	0·05	0·04	0·08	0·02	0·01	0·05	0·06	0·01	2nd „	
0·02	...	0·08		0·04	...		0·12	0·01	0·12	0·09	...	...	0·95	...	...	1st half	176
0·06	...	0·02		0·26	...		0·12	0·01	0·22	0·08	...	...	0·06	...	...	2nd „	
0·23	0·52	...		0·19	1·85		0·15	—*0·01*	0·18	0·24	1·18	...	...	...	...	1st half	177
0·50	0·22	...		0·26	1·67		0·16	...	0·31	0·15	1·42	0·18	...	...	...	2nd „	
0·45	0·94	1·04		0·42	0·44		0·48	1·65	0·72	1·01	0·47	0·97	1·28	2·48	0·58	1st half	178
0·53	0·97	1·12		1·38	0·44		0·55	1·57	0·68	1·26	0·31	1·09	1·08	2·64	0·28	2nd „	
0·75	1·49	1·17		0·68	2·30		0·83	1·76	1·05	1·56	1·68	1·00	2·41	2·54	0·59	1st half	179
1·18	1·24	1·23		1·97	2·20		1·00	1·63	1·26	1·60	1·75	1·26	1·85	2·70	0·94	2nd „	

Included with the 5′ 6″ gauge.

Included with the Assam-Bengal.

APPEN

Analysis of working of each railway

EXTRACT FROM TABLES PRINTED

NOTE.—Railways not shown

Serial number.	PARTICULARS.	GAUGE.	5'6"										
		Number		1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a)
		Calendar year 1905 by half-years.	Bengal Central.	Bengal-Nagpur.	Bombay, Baroda and Central India.	Eastern Bengal.	East Indian.	Great Indian Peninsula.	Madras.	The Nizam's Guaranteed State.	North Western.	Oudh and Rohilkhand	Assam-Bengal.
	FROM APPENDIX I.												
180	Average number of locomotives on the line . . *No.*	1st half	24	253	220	142	950	835	265	59	733	200	76
		2nd ,,	...	289	216	183	911	836	265	59	746	203	76
181	Average miles run per locomotive *per diem* . . *Miles.*	1st half	55·26	73·14	54·19	57·00	63·68	59·75	65·13	54·26	75·67	80·74	60·86
		2nd ,,	...	59·67	49·72	68·59	64·53	53·59	62·43	57·01	72·21	78·86	67·14
	lbs. coal per engine mile (coal burning engines)—												
182	Coaching . . . . *lbs.*	1st half			47·98					43·20			
		2nd ,,			46·16					41·23			
183	Goods . . . . . ,,	1st half	43·19	56·22	47·01	52·65	53·19	49·70	50·49	52·74	46·53	45·44	40·33
		2nd ,,	...	53·45	48·09	54·19	50·94	47·81	50·45	47·56	47·61	45·04	34·06
184	Mixed . . . . . ,,	1st half			51·80					51·31			
		2nd ,,			44·78					48·07			
	lbs. wood per engine-mile (wood burning engines)—												
185	Coaching . . . *lbs.*	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
186	Goods . . . . . ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
187	Mixed . . . . . ,,	1st half	...	...	...	...	...	...	...	...	...	...	...
		2nd ,,	...	...	...	...	...	...	...	...	...	...	...
	Average gross weight of trains—												
188	Coaching . . . *Tons*	1st half	166·11	209·95	177·63	171·20	206·61	168·29	161·56	137·72	236·89	203·16	120·89
		2nd ,,	...	190·25	172·77	197·54	223·68	174·09	155·14	128·26	236·53	182·05	103·57
189	Goods . . . . . ,,	1st half	180·00	415·57	575·89	394·89	573·58	358·82	470·37	349·17	331·40	322·22	86·88
		2nd ,,	...	385·70	583·97	431·67	539·66	337·26	462·02	270·58	310·33	333·57	180·13
190	Mixed . . . . . ,,	1st half	166·11	309·25	201·64	219·46	294·30	...	285·67	317·16	265·17	221·40	144·07
		2nd ,,	...	280·85	192·32	207·10	261·15	...	292·11	324·66	255·76	202·05	150·90
	Average through speed of trains—												
191	Coaching . *Miles per hour*...	1st half	20	27·94	22·83	19·07	22·00	25·54	21·25	22·68	20·18	28·79	...
		2nd ,,	...	28·96	22·96	19·07	22·00	28·46	21·25	22·63	20·14	28·82	...
192	Goods . . ,,	1st half	14	11·89	10·24	15·00	12·00	12·05	11·23	9·50	11·49	11·15	...
		2nd ,,	...	11·68	10·78	15·00	12·00	10·49	11·23	9·50	11·36	10·72	...
193	Mixed . . ,,	1st half	15	17·33	15·99	14·30	18·00	14·41	10·82	14·55	14·66	18·95	13·12
		2nd ,,	...	17·38	15·78	14·30	18·00	15·98	10·82	14·55	14·32	16·28	13·12
	FROM APPENDIX II.												
194	Average mileage *per diem* of coaching vehicles, including brakes . . . *Miles*	1st half	9,766	96,220	92,400	49,995	275,508	260,979	91,745	16,247	327,361	109,951	30,703
		2nd ,,	...	89,747	91,627	69,144	291,670	277,852	90,689	16,059	347,400	112,986	30,608
195	Goods ditto ditto ,,	1st half	4,892	270,187	158,187	61,612	1,049,960	634,096	233,218	45,795	705,805	156,678	34,156
		2nd ,,	...	199,186	119,474	110,090	935,474	485,570	224,663	42,143	601,040	147,535	50,079
	FROM APPENDIX V.												
	Average age of sleepers—												
196	Wood . . . . *Years*	1st half	12·04	5·39	9·41	8·00	9·30	...	5·00	...	7·43	11·39	...
		2nd ,,	...	5·74	9·62	8·00	9·53	...	5·33	...	8·01	12·79	...
197	Iron . . . . . ,,	1st half	...	9·86	12·99	11·00	9·36	...	33·59	...	11·18	14·90	...
		2nd ,,	...	10·23	13·49	11·50	9·53	...	32·33	...	11·78	14·66	...
	Percentage of removals—												
198	Wood . . . *Per cent.*	1st half	4·72	3·55	3·22	9·11	3·16	4·79	1·77	3·40	1·33	0·13	2·02
		2nd ,,	...	6·14	2·92	4·07	2·77	5·21	3·10	...	1·01	2·42	1·38
199	Iron . . . ,,	1st half	...	0·29	0·44	2·61	3·29	2·40	0·29	...	4·27	7·30	...
		2nd ,,	...	0·66	0·47	0·63	2·28	0·56	0·29	...	2·81	6·91	...1

DIX 18—*concluded.*

(by systems) during each half-year of 1905—concld.

AS APPENDICES TO THE ANALYSIS.

do not prepare these statistics.

12 (a) & (b) Bengal and North-Western.	14 (a) to (d) Bhavnagar-Gondal-Junagad-Porbandar.	15 (a) Burma.	3 (b) and (c) Eastern Bengal.	8 (c) Hyderabad-Godavari Valley.	18 (a) to (c) Jodhpur-Bikaner.	11 (b) Noakhali (Bengal).	2 (g) to (m) Rajputana-Malwa.	20 (a) & (b) Rohilkund and Kumaon.	21 (a) to (f) South Indian.	22 (a) to (j) Southern Mahratta.	23 (a) Udaipur-Chitor.	2' 6" 1 (b) Jubbulpore-Gondia extension.	2' 6" 80 (a) Kalka-Simla.	2' 6" 9 (g) & (h) Khushalgarh-Kohat-Thal and Nowshera-Durgai.	2' 6" 1 (e) Raipur-Dhamtari.	Gauge. Number. Calendar year 1905 by half-years.	Serial number.
218	31	242	132	50	48		434	33	219	222	3	10	18	26	4	1st half	180
234	27	250	140	50	48		448	36	217	237	3	11	24	28	4	2nd ,,	
72·35	57·87	67·41	58·23	65·80	64·20		56·57	68·85	61·25	60·17	...	72·89	40·00	35·42	43·22	1st half	181
63·05	59·83	63·65	61·63	49·07	66·23		51·71	59·37	65·73	55·95	...	71·19	19·97	43·13	43·10	2nd ,,	
																1st half	182
																2nd ,,	
																1st half	183
34·83	29·49	40·78	36·28	35·29	42·22		36·13	...	30·73	32·39	25·80	43·78	65·00	14·82	31·40	2nd ,,	
29·05	28·53	38·03	36·73	36·25	41·62		33·28	...	29·68	32·56	28·46	39·43	61·46	14·62	23·41	1st half	184
																2nd ,,	
...	...	...	...	...	...		...		...		...	...	...	...	...	1st half	185
...	...	...	...	...	...		...		...		...	...	...	...	...	2nd ,,	
...	...	...	...	...	...		...	34·36	...	28·85	...	...	...	...	...	1st half	186
...	...	...	...	...	...		...	35·25	...	30·30	...	...	...	...	...	2nd ,,	
...	...	...	...	...	...		...		...		...	...	...	...	...	1st half	187
...	...	...	...	...	...		...		...		...	...	...	...	...	2nd ,,	
168·23	90·44	129·28	117·00	*215·82	103·29		108·32	...	91·63	92·94	...	...	60·00	77·26	...	1st half	188
147·65	91·68	129·53	134·35	*50·77	211·45		114·55	...	91·39	93·74	...	...	60·00	...	...	2nd ,,	
216·70	186·65	204·01	237·67	185·05	191·39		273·09	...	163·65	231·52	...	166·68	60·00	41·69	92·13	1st half	189
178·37	198·25	182·10	299·11	198·99	125·12		258·74	...	158·41	267·01	...	160·86	68·00	35·54	35·80	2nd ,,	
179·58	144·97	178·77	124·32	153·42	127·40		130·32	...	157·32	212·57	144·99	142·18	60·00	58·41	74·08	1st half	190
166·51	138·86	172·48	146·22	142·82	201·72		135·99	...	156·00	219·50	156·18	135·55	77·70	43·70	55·62	2nd ,,	
17·00	20·65	18·22	19·28	...	...		17·59	...	18·00	16·18	...	...	9·00	...	...	1st half	191
17·00	20·65	13·82	19·28	...	...		17·97	...	18·00	18·04	...	...	9·00	...	...	2nd ,,	
9·50	11·69	10·05	11·16	11·01	12·27		10·11	10·01	9·50	7·60	...	11·75	9·00	8·54	...	1st half	192
9·50	11·26	10·05	11·16	11·01	14·24		9·46	9·86	9·50	7·55	...	9·69	9·00	8·72	...	2nd ,,	
12·20	12·64	12·91	12·51	13·08	15·10		14·29	13·04	12·00	11·67	14·76	11·22	9·00	9·67	10·37	1st half	193
12·20	12·64	12·91	15·00	13·08	12·27		14·41	12·72	12·00	12·71	14·76	11·33	9·00	9·72	10·37	2nd ,,	
134,785	20,409	113,612	57,809	17,566	30,319		178,854	16,224	126,958	81,604	1,954	4,684	1,535	4,300	818	1st half	194
139,661	21,000	111,223	69,120	16,417	32,277		203,433	16,384	126,526	90,060	1,172	6,085	1,787	4,767	740	2nd ,,	
208,573	20,975	214,509	72,315	40,608	37,589		417,823	22,157	124,401	175,589	469	8,542	1,602	3,904	2,051	1st half	195
168,965	14,086	183,109	90,910	23,310	36,604		312,292	21,009	139,055	158,422	503	7,782	1,689	5,508	1,088	2nd ,,	
	12·88	11·24	11·50	...		...	7·50	11·96	12·77	11·50	...	1·45	...	3·06	5·46	1st half	196
8·98	13·07	11·43	11·00	...	11·50	...	8·00	10·82	12·60	11·00	...	1·95	...	3·67	5·93	2nd ,,	
9·23	15·08	9·34	15·00	...	12·00	...	18·50	...	16·02	17·00	...	...	...	2·87	...	1st half	197
	15·49	9·34	15·50	...		...	19·00	...	16·43	17·50	...	...	...	3·37	...	2nd ,,	
	4·32	3·27	2·94	...		...	3·26	14·31	10·35	5·67	1·51	0·09	...	0·21	0·71	1st half	198
1·43	2·19	2·10	1·53	...	0·31	...	2·22	13·45	2·36	4·19	3·69	0·01	...	0·50	0·51	2nd ,,	
2·13	0·34	...	1·94	...	0·25	...	...	...	0·69	0·14	...	...	...	...	...	1st half	199
	0·26	...	0·57	...		0·01	...	...	0·55	0·65	...	...	...	0·06	...	2nd ,,	

Included with the Assam-Bengal.

* Of local trains only.

Rolling-stock under different heads on each

Items.	GAUGE.	5′ 6″										3′ 3½″								
	NUMBER.	1 (a)	2 (a) to (f)	3 (a)	4 (a) to (d)	5 (a) to (f)	6 (a) to (c)	8 (a) & (b)	9 (a) to (f)	10 (a) & (b)	11 (a) & (b)	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	15 (a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)
	Railway.	B. N.	B. B. & C. I	E. B. S.	E. I.	G. I. P. & I. M.	M.	N. G. S.	N. W.	O. & B.	[redacted]	B. & N. W.	B. D.	B. G. J. P.	B.	D.	D. S.	E. B. S. M.	H. G. V.	J. B.
	Engines.																			
1	Passenger engines	77	87	71	150	823	54	5	756	205	77	85	10	37	28	2	22	137	55	48
2	Goods and mixed engines	214	132	115	802		312	56				205			223					
3	TOTAL ENGINES	291	219	186	952	823	266	61	756	205	77	240	10	37	251	2	22	137	55	48
	Coaching vehicles.																			
4	Saloons, Royal and State	...	...	...	4	...	2	13	11	...	3	3	...	...	2	...	...	2	3	3
5	Saloons, ordinary	...	13	18	...	...	...	...	1	...	...	13	4	2	8	...	...	19	...	...
6	Reserved carriages	15	9	2	43	7	13	5	62	18	...	4	...	7	31	...	...	...	8	...
7	Inspection carriages	...	...	...	...	1	3	...	...	1	8	...	1	...	...	...	...	...	...	5
8	Family carriages	...	...	...	...	8	3	2	...	2	...	...	...	5	1	...	...	...	...	...
9	First class carriages { 4-wheeled	26	2	15	87	92	38	10	82	40	1	9	2	8	27	...	...	14	8	7
	{ Bogie	...	1	...	2	2	5	...	...	...	...	31	...	1	...	...	...	2	...	...
10	Dining cars	2	...	...	2	12	...	...	...	3	3	3	2	...	1	...	...	...	13	4
11	Composite, first and second class { 4-wheeled	48	16	50	64	37	66	12	105	56	4	28	7	2	38	...	10	52	...	20
	{ Bogie	...	22	12	29	29	...	...	23	10	12	12	...	5	11	...	...	5	...	...
12	Composite, first, second and third class. { 4-wheeled	...	...	...	...	2	...	...	...	4	...	...	...	...	...	...	...	...	...	...
	{ Bogie	...	...	...	...	17	8	...	...	...	14	...	...	...	28	...	...	...	...	...
13	Other composite carriages	5	2	27	50	1	...	...	46	6	...	...	...	3	5	2	...	3	...	3
14	Second class { Bogie	...	12	...	...	1	...	...	...	...	...	...	...	2	...	...	...	2	...	...
	{ Ordinary	29	20	16	77	144	79	10	94	33	...	38	1	10	40	...	...	16	10	6
15	Second class with postal accommodation.	...	...	...	...	22	...	...	...	...	...	...	...	5	...	...	...	...	...	...
16	Intermediate class { 4-wheeled	26	6	29	71	...	4	...	124	39	...	32	...	10	...	...	...	45	...	17
	{ Ambulance.	...	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	{ Bogie	...	12	...	17	...	...	...	1	...	...	...	...	2	...	...	...	2	...	...
17	Composite, intermediate and third class.	15	...	38	39	...	7	...	69	31	33	61	1	...	...	...	...	40	...	1
18	Intermediate and postal carriages	3	4	6	...	...	...	...	18	...	...	...	2	...	...	...	...	3	...	...
19	Intermediate, third and postal carriages.	1	...	3	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...
20	Lower class	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Third class carriages { 4-wheeled	...	157	199	620	616	484	64	75	6	...	360	24	125	240	8	37	249	65	69
	without brakes. { Bogie	...	80	27	105	51	9	...	...	...	...	6	...	12	128	...	...	32	3	22
	{ Ambulance.	...	15	...	92	19	53	...	174	...	...	...	...	...	54	...	...	...	...	...
22	Third class and postal vans	14	13	...	51	23	12	5	47	33	16	18	...	4	29	...	...	8	4	10
23	Third class carriages with brakes { 4-wheeled	296	12	...	29	135	12	...	205	84	...	202	...	...	8	...	...	7	...	...
	{ Bogie	49	18	...	38	26	...	...	156	26	53	...	...	...	37	...	...	...	...	...
	{ Ambulance.	23	...	...	...	22	...	...	253	207	...	...	...	...	...	...	...	...	...	...
24	Brakevans	227	172	105	766	640	247	49	464	159	16	173	15	41	165	2	26	110	40	32
25	Brakevans with third class	81	...	25	...	16	40	...	101	7	64	...	...	...	35	...	...	...	...	5
26	Brakevans fitted with postal compartment.	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Postal vans	...	...	1	22	9	9	...	10	...	...	...	...	...	5	...	...	3	...	...
28	Composite, postal and other carriages	...	...	...	...	6	...	...	...	...	...	...	...	6.	...	...	...	...	...	...
29	Prison vans	...	...	...	...	8	...	...	...	...	...	...	...	...	3	...	...	1	...	...
30	Carriage trucks	4	4	7	39	55	27	2	42	...	...	5	...	6	1	...	...	5	...	...
31	Horse boxes	16	18	20	75	114	56	10	142	43	16	30	1	5	37	...	3	10	10	12
32	Luggage vans	31	26	26	41	115	40	6	61	43	12	1	...	...	31	...	4	10	...	...
33	Produce Vendors' vans	...	...	16	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	Milk vans	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Fish vans	...	...	21	...	...	...	...	...	...	3	...	...	...	...	...	2	28	...	...
36	Store, ice and stationery vans	...	...	...	1	...	...	...	18	...	...	...	...	...	...	...	...	...	...	...
37	Miscellaneous	...	...	8	1	...	...	...	5	2	1	...	...	...	20	...	2	13	...	1
38	TOTAL COACHING VEHICLES	911	634	712	2,375	2,288	1,212	188	2,390	853	259	1,029	63	255	985	12	84	681	164	217
	Goods vehicles.																			
39	Covered goods wagons, bogie. { Ordinary	2,498	...	...	...	...	...	...	...	...	100	200	...	...	625	...	...	177	...	6
	{ Military	1,278	...	...	...	...	...	...	418	...	...	...	...	...	75	...	...	...	...	...
40	Covered goods wagons, 4-wheeled. { Ordinary	...	1,318	1,283	8,241	7,546	868	59	2,098	2,151	1,115	5,182	263	153	2,804	4	223	2,119	320	596
	{ Military	...	1,404	1,382	...	...	2,917	102	5,592	2,733	...	...	...	145	20	...	...	538	100	...
41	High-sided wagons, bogie	...	...	...	...	50	...	10	...	...	14	...	...	...	16	...	...	...	2	...
42	High-sided wagons, 4-wheeled	...	1,003	3	1,000	3,558	1,299	717	1,113	...	125	...	...	...	60	...	744	...	250	...
43	Medium-sided wagons, bogie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
44	Medium-sided wagons, 4-wheeled	290	413	...	...	...	...	32	...	...	...	...	...	...	310	6	...	...	...	...
45	Low-sided wagons, { Ordinary	...	...	...	...	...	...	...	102	162	...	28	...	20	115	...	...	51	...	150
	bogie. { Military	...	70	...	...	...	...	...	140	374	...	...	...	...	...	...	...	...	...	...
46	Low-sided wagons, { Ordinary	190	102	131	6,674	905	120	...	451	...	300	544	66	565	...	...	70	269	...	145
	4-wheeled. { Military	156	85	367	...	...	229	...	1,082	...	...	...	...	...	286	...	...	228	...	...
47	Coal or coke wagons	2,740	100	...	1,358	...	50	...	...	110	...	...	...	...	...	...	...	...	...	...
48	Cattle wagons	...	...	1	7	...	21	...	24	...	4	...	...	6	166	...	...	...	...	35
49	Accident vans	14	14	13	46	39	18	...	...	...	5	...	1	...	13	...	...	7	...	...
50	Platform wagons	...	...	...	43	...	3	...	...	...	...	2	...	...	...	...	...	3	...	...
51	Powder vans	6	6	5	31	24	9	...	47	8	3	1	...	2	12	...	1	2	...	1
52	Timber trucks	36	20	16	...	191	216	10	49	...	46	279	14	22	91	...	50	114	20	...
53	Bolster trucks { Double	...	...	...	...	...	...	...	...	...	...	...	...	...	157	...	...	...	...	...
	{ Single	14	...	109	...	50	...	...	271	...	16	...	...	...	150	...	...	...	...	...
54	Ballast wagons	76	478	38	...	126	30	64	...	...	50	...	...	74	116	...	...	...	83	...
55	Travelling oil tanks	31	20	26	54	31	45	...	51	10	...	...	...	1	2	...	...	10	1	...
56	Travelling water tanks	...	25	8	...	11	10	3	72	1	...	...	...	2	23	...	...	...	1	7
57	Travelling gas holders	8	8	2	3	15	12	2	15	6	8	...	...	...	...	...	...	4	2	...
58	Travelling cranes	11	4	7	31	57	15	2	52	17	15	19	3	2	30	...	1	13	2	...
59	Miscellaneous	31	10	14	7	1	16	7	16	7	12	15	1	56	84	...	...	19	6	1
60	TOTAL GOODS VEHICLES	7,379	5,105	4,053	17,495	12,004	4,918	1,008	11,622	5,579	1,813	6,270	348	1,048	5,155	10	1,039	3,557	817	941
	LOWER CLASS CARRIAGES FITTE																			
	Intermediate class	...	16	9	71	...	...	...	120	45	...	...	...	12	...	...	...	...	...	20
	Composite, intermediate & 3rd class	...	...	15	29	...	...	...	...	...	...	...	...	...	...	...	...	22	...	...
	Third class	40	26	4	201	100	62	64	459	155	16	...	3	21	52	...	10	...	64	83
	TOTAL	40	42	28	301	100	62	64	579	200	16	...	3	33	52	...	10	22	64	103
	LOWER CLASS CARRIAGES PROVIDED WITH LATRIN																			
	Intermediate class	35	17	24	81	...	4	...	125	45	...	...	3	12	...	...	...	45	...	2
	Composite, intermediate and 3rd class.	...	...	24	39	...	...	...	55	...	...	...	...	...	...	...	...	40	...	...
	Third class	40	65	84	219	191	94	64	490	195	19	...	3	21	80	...	10	272	64	83
	TOTAL	75	82	132	339	191	98	64	670	240	19	...	6	33	80	...	10	357	64	103

DIX 22.

railway at close of the calendar year 1905.

3' 3½"						2' 6"																2' 0"						
19	6 (d) & (e)	2 (g) to (m)	20 (a) & (b)	21 (a) to (f)	22 (a) to (j)	23	24	25	26	3 (d)	27	3 (b)	2 (n) & (o)	1 (b) & (e)	30	9 (g) & (k)	19	1 (c)	1 (d)	20 (c)	32	33	6 (f)	9 (i)	35	5 (g)	36	37	38	Items.
M. R. W.	N. & S.C.	B.M.	B. & K.	S. L	S. M.	U. C.	B. B. L.	B. L.	B. B.	S.	C.	E. B. S. M.	G. D. & R.	J.G. E & R.D	K. S.	K. T. & N. D.	M. R W.	M. B.	P. L. L.	P. W. L.	B. P.	T. B	T. K.	D. L.	D. H.	G. L.	H. A	H. S.	J.	
3 / 1	18	145 / 303	40	73 / 155	237	1 / 2	3	7	3	5	2	10	11	19	24	30	6	3	3	5	4	3	3	7	18	15	7	4	7	1 / 2
4	18	448	40	228	237	3	3	7	3	5	2	10	11	19	24	30	6	3	3	5	4	3	3	7	18	15	7	4	7	3
...	1	7	...	3	9	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...	...	...	4
3	...	4	...	3	...	...	...	...	...	1	...	1	3	...	...	...	3	...	...	...	...	...	...	...	3	2	...	...	...	5
...	...	...	4	...	12	...	...	...	...	...	...	...	...	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
...	...	11	2	14	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	1	...	...	...	7
...	...	...	...	3	...	1	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	8
3	...	88	6	19	44	...	...	...	...	1	...	...	1	...	12	3	...	2	...	...	...	...	...	...	18	4	...	...	...	9
...	2	...	6	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
5	1	45	8	47	54	3	2	...	2	...	...	...	...	2	4	8	...	...	...	3	2	...	...	...	5	...	...	...	...	11
...	2	24	...	...	18	...	...	...	...	2	...	6	...	...	...	...	4	...	...	...	...	...	2	...	...	...	...	...	...	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	2	...	...	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	4	
...	...	5	...	9	...	...	...	4	1	2	...	5	...	5	...	...	...	2	1	...	1	2	...	...	3	2	5	2	2	13
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	2	
3	...	83	6	28	37	1	...	...	...	...	...	...	...	...	14	...	...	...	...	...	...	...	...	...	26	3	...	...	...	14
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	15
30	...	50	3	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16
...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	15	7	...	...	...	...	...	...	2	...	...	...	...	...	5	...	...	...	...	2	...	...	...	...	...	3	2	...	17
...	...	8	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	2	...	...	...	...	31	...	...	...	...	...	3	...	...	7	...	...	...	...	...	...	11	20
...	...	531	49	520	204	13	6	...	15	...	...	...	...	14	26	22	15	...	...	10	14	...	...	...	39	...	49	14	...	
...	21	183	20	...	53	...	...	...	...	6	1	19	...	...	...	6	13	3	...	...	...	...	6	...	...	28	...	...	...	21
...	...	5	...	15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	32	2	12	89	1	1	...	1	...	...	2	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	22
...	...	139	10	...	237	...	...	...	...	...	...	...	...	...	...	9	...	...	...	...	...	...	...	9	...	...	...	...	...	
...	...	...	9	187	19	...	...	...	...	...	...	...	...	17	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	23
...	...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
6	10	288	25	84	45	3	...	...	...	...	1	7	11	18	18	14	6	...	3	...	3	...	...	...	...	...	7	1	...	24
...	4	...	...	42	180	...	3	...	3	2	...	5	...	16	...	1	...	...	...	4	1	...	3	...	...	...	2	1	...	25
...	...	...	17	6	...	...	...	...	...	...	...	...	...	...	...	3	...	2	...	...	...	3	...	...	...	10	...	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	27
...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
...	...	5	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
...	3	38	...	5	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
2	3	82	5	30	47	1	...	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...	5	...	...	...	...	31
...	...	27	...	81	22	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	32
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36
...	...	1	...	10	10	...	...	...	...	...	...	1	...	...	...	3	...	...	...	...	...	...	...	...	...	2	...	...	...	37
55	52	1,679	184	1,099	1,053	26	13	7	24	16	3	47	54	56	78	80	53	9	8	18	25	14	11	9	97	63	66	20	22	38
...	75	471	245	75	85	25	...	7	...	56	...	47	...	150	...	49	10	2	2	1	...	...	12	...	...	...	10	...	42	39
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
29	...	3,662	770	1,894	3,364	...	6	...	14	...	...	...	38	20	79	25	10	2	...	57	20	30	...	...	44	...	14	4	...	40
...	...	1,020	...	263	193	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	80	...	...	...	
25	48	...	...	10	87	...	...	5	2	...	...	...	...	...	...	13	9	...	...	...	...	...	12	...	...	2	...	...	22	41
...	...	134	...	813	170	...	...	...	...	15	...	...	...	...	25	19	...	...	...	...	12	...	...	...	183	43	4	4	...	42
...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	43
...	...	150	...	...	140	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	44
...	...	287	30	20	...	...	...	...	...	9	3	...	96	50	...	14	34	...	12	...	21	6	...	...	...	10	...	...	4	45
...	7	953	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	17	33	...	448	10	19	39	12	...	...	32	78	30	30	4	...	...	2	3	...	...	...	...	7	...	4	...	3	46
...	...	1,196	...	...	8	...	...	...	...	...	...	...	...	25	...	67	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	350	...	...	...	...	...	...	...	...	...	...	69	...	...	...	...	...	...	...	326	...	...	...	...	...	47
...	...	...	...	6	28	...	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	48
1	...	16	5	...	13	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	49
...	...	...	...	4	45	...	...	...	...	...	...	...	...	1	...	7	...	...	...	...	2	...	...	...	...	...	...	...	...	50
...	...	35	2	7	13	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	51
...	8	79	76	33	127	...	...	...	...	13	...	9	...	23	4	...	...	...	...	2	...	...	...	...	4	...	...	...	5	52
...	...	...	...	38	30	...	...	...	...	...	...	110	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	
...	...	...	...	...	65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	...	...	...	53
...	22	...	...	522	...	...	...	10	...	...	...	...	...	...	...	150	...	...	...	...	...	...	...	...	...	...	...	...	...	54
...	4	21	...	24	8	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	55
...	...	...	...	23	8	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	56
...	...	...	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	57
...	...	27	8	8	21	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	58
...	...	1	...	13	20	...	...	...	...	...	...	...	2	...	...	2	...	...	...	9	...	...	...	...	8	...	...	...	...	59
55	170	8,009	1,219	8,753	5,218	35	25	62	28	78	18	201	209	300	140	431	68	12	16	71	41	50	24	326	248	236	32	8	76	60
WITH CLOSETS FOR FEMALES.																														
...	...	70	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	203	4	51	63	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	273	13	51	63	17	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
ACCOMMODATION, INCLUDING THOSE FOR FEMALES.																														
...	...	70	9	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	17	235	4	134	110	17	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	
...	17	305	13	134	110	17	...	...	...	...	...	2	...	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	

Number of, outlay on, and

Progressive No.		GAUGE.	5′ 6″						
		NUMBER.	1 (*a*).	2 (*a*) to (*f*)	3 (*a*).	4 (*a*) to (*d*).	5 (*a*) to (*f*).	6 (*a*) to (*c*).	8 (*a*) & (*b*).
		Particulars.	B. N.	B. B. & C. I.	E. B. S.	E. I.	G. I. P.	M.	N. G. S.
		ENGINES.							
		(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)							
1	Passenger engines	Number at close of 1904	57	82	59	144	...	54	5
2		Number added in 1905	20	5	12	6	...	...	...
3		Number at close of 1905	77	87	71	150	...	54	5
4	Goods and mixed engines.	Number at close of 1904	174	135	115	771	821	203	56
5		Number added in 1905	40	—3	...	31	2	10	...
6		Number at close of 1905	214	132	115	802	823	213	56
7	Total number of locomotives on the 31st December		291	219	186	952	823	266	61
8	Number per mile of line open of all classes		0·17	0·26	0·37	0·42	0·29	0·19	0·17
9	Average mileage run by each *per annum*.	Passenger	30,835	24,031	23,321	36,719	27,029	28,959	17 963
10		Goods	18,457	10,402	18,456	20,271	17,852	21,602	19.063
11		All classes	22,627	18,876	20,313	22,863	20,662	23,101	18,972
12	Average mileage run by each *per diem*.	Passenger	57	65	64	101	74	79	49
13		Goods	51	28	50	55	49	60	52
14		All classes	64	52	56	63	56	64	52
15	Ton-mileage hauled per engine, in thousands of tons		9,610	6,103	4,686	8,166	6,185	6,577	5,915
16	Average under repairs or renewals at any one time		63	35	25	109	194	55	10
17	Total value, in thousands of rupees		1,46,87	...	...	1,90,44	2,77,96	94,34	...
18	Total value per mile of line open		8,691	...	...	8,518	9,907	6,699	...
		COACHING STOCK.							
		(In the table below where the value of coaching stock is not shown it is included with that of Goods.)							
19	Number per mile of	1st class	0·04	0·05	0·13	0·03	0·07	0·07	0·10
20		2nd class	0·03	0·07	0·10	0·06	0·08	0·08	0·05
21		Intermediate class	0·02	0·03	0·16	0·06	...	0 01	...
22		3rd class	0·26	0·36	0·59	0·42	0·31	0·40	0·19
23		All other classes	0·19	0·26	0·45	0·44	0·36	0·30	0·19
24		Total of all classes	0·54	0·77	1·43	1·06	0·82	0·86	0·53
25	Number at close of 1904	1st class	38,167	...	25,570	60,339	52,274	31,031	...
26		2nd class	46,210	...	33,642	70,850	53,067	28,987	...
27		Intermediate class	69,979	...	39,153	76,035	...	56,536	...
28		3rd class	45,820	...	37,322	67,838	56,539	36,094	...
29		All other classes	35,048	...	23,404	33,171	38,794	31,515	...
30		Total of all classes	42,399	54,730	31,902	53,432	48,062	33,563	38,580
31	Number added in 1905	1st class	911	632	698	2,389	2,243	1,201	190
32		2nd class	...	2	14	—5	45	11	— 2
33		Intermediate class	911	634	712	2,375	2,288	1,212	188
34		3rd class	0·03	0·07	0·10	0·06	0·08	0·08	0·05
35		All other classes	0·02	0·03	0·16	0·06	...	0 01	...
36		Total of all classes	0·26	0·36	0·59	0·42	0·31	0·40	0·19
37	Number at close of 1905	1st class	0·19	0·26	0·45	0·44	0·36	0·30	0·19
38		2nd class	0·54	0·77	1·43	1·06	0·82	0·86	0·53
39		Intermediate class	38,167	...	25,570	60,339	52,274	31,031	...
40		3rd class	46,210	...	33,642	70,850	53,067	28,987	...
41		All other classes	69,979	...	39,153	76,035	...	56,536	...
42		Total of all classes	45,820	...	37,322	67,838	56,539	36,094	...
43	Average mileage run by each *per annum*.	1st class	35,048	...	23,404	33,171	38,794	31,515	...
44		2nd class	42,399	54,730	31,902	53,432	48,062	33,563	38,580
45		Intermediate class	69,979	...	39,153	76,035	...	56,536	...
46		3rd class	45,820	...	37,322	67,838	56,539	36,094	...
47		All other classes	35,048	...	23,404	33,171	38,794	31,515	...
48		Total of all classes	42,399	54,730	31,902	53,432	48,062	33,563	38,580
49	Average mileage run by each *per diem*		116	150	87	146	132	92	106
50	Freight ton-mileage per vehicle, in thousands of tons		37	58	25	50	38	30	30
51	Average under repairs or renewals at any one time		125	90	72	450	268	113	21
52	Total value, in thousands of rupees		71,16	...	...	...	1,18,27	46,18	...
53	Total value per mile of line open		4,211	...	...	...	4,215	3,280	...
		GOODS STOCK.							
54	Number at close of 1904.	Covered wagons	3,776	2,721	3,215	3,276	7,140	2,807	161
55		Open ,,	3,241	2,281	412	8,900	3,997	1,842	759
56		Timber trucks, including bolster trucks	50	20	126	...	241	197	10
57		All other classes	81	83	94	206	174	69	78
58		Total of all classes	7,148	5,105	3,847	17,382	11,552	4,915	1,008
59	Number added in 1905.	Covered wagons	...	—4	100	— 28	406	93	...
60		Open ,,	231	...	97	132	42	— 80	...
61		Timber trucks, including bolster trucks	...	...	— 1	...	...	— 12	...
62		All other classes	...	4	10	9	4	2	...
63		Total of all classes	231	...	206	113	452	3	...
64	Number at close of 1905.	Covered wagons	3,776	2,717	3,315	3,248	7,546	2,900	161
65		Open ,,	3,472	2,281	509	9,032	4,039	1,762	759
66		Timber trucks, including bolster trucks	50	20	125	...	241	185	10
67		All other classes	81	87	104	215	178	71	78
68		Total of all classes	7,379	5,105	4,053	17,495	12,004	4,918	1,008
69	Number of all classes per mile of line open		4·36	5·75	8·14	7·67	4·28	3·49	2·84
70	Average mileage run by each *per annum*		15,105	10,091	7,287	19,026	13,589	12,953	13,067
71	Average mileage run by each *per diem*		41	28	20	52	37	35	49
72	Average tare in tons	Covered wagons	8·23	6·88	7 69	7·25	7·43	7·37	7 30
73		Open ,,	8·31	6·14	7·43	6·68	6·85	6·65	7·00
74	Average carrying capacity in tons	Covered wagons	14 94	14·03	12·45	14·86	14·12	14·32	13·25
75		Open ,,	16·48	14·10	15·96	14·67	14·73	13·78	16·78
76	Average load of a goods vehicle, loaded and empty, per mile		7·24	6·96	6·23	7·39	6·68	5·19	6 90
77	Freight ton-mileage per vehicle, in thousands of tons		79	69	47	143	105	83	102
78	Average under repairs or renewals at any one time		216	254	261	691	556	342	56
79	Total value, in thousands of rupees		2,05,49	...	...	10,01,96	2,60,40	1,35,23	...
80	Total value per mile of line open		12,161	...	...	43,926	9,281	9,604	...
81	Grand total value of rolling-stock, in thousands of rupees		4,23,52	2,88,19	1,83.15	11,92,40	6,56,63	2,75,75	54,68
82	Grand total value of rolling-stock, per mile of line open		25,061	27,441	36,777	52,275	22,695	19,583	15,609

DIX 23.

work done by, Rolling-stock.

9 (a) to (f)	10 (a) & (b)	3′ 3½″ 11 (a) & (b)	12 (a) & (b)	13 (a) & (b)	14 (a) to (d)	15 (a)	16	17 (a) & (b)	3 (b) & (c)	8 (c)	18 (a) to (c)	19	6 (d) & (e)	2 (g) to (m)	Progressive No.
N. W.	O. & E.	A. B.	B. & N.W.	B. D.	B. G. J. F.	B.	D.	D. S.	E. B S. M.	H. G. V.	J. B.	M. R. W.	N. & S. C.	E. M.	

ENGINES.

(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)

...	...	...	20	...	...	28	...	...	...	...	...	...	4	145	1
...	...	...	15	...	...	...	...	...	...	...	...	3	2	...	2
...	...	...	35	...	...	28	...	...	...	...	...	3	6	145	3
719	202	72	205	10	37	208	4	22	133	55	48	...	12	290	4
37	3	5	...	...	...	15	−2	...	4	...	...	1	...	13	5
756	205	77	205	10	37	223	2	22	137	55	48	1	12	303	6
756	205	77	240	10	37	251	2	22	137	55	48	4	18	448	7
0·19	0·16	0·09	0·15	0·06	0·06	0·19	0·40	0·28	0·19	·14	0·06	0·05	0·22	0·21	8
...	46,152	...	29,435	...	...	30,715	...	...	25,802	...	...	...	9,118	23,943	9
...	14,114	...	23,660	...	...	17,603	...	...	16,662	...	...	...	10,407	17,276	10
26,383	28,575	23,741	22,189	28,427	16,784	23,149	18,372	15,634	20,973	19,035	23,807	23,129	9,891	19,434	11
...	126	...	56	...	...	84	...	...	71	...	...	...	37	65	12
...	39	...	65	...	...	48	...	...	46	...	...	...	29	47	13
72	78	65	63	78	46	63	51	43	57	52	65	63	31	53	14
7,721	7,467	3,488	4,083	...	2,709	4	...	...	3,494	3,365	4,670	...	1,163	1,392	15
...	26	8	27	1	1	20	...	7	25	7	7	...	2	56	16
2,66,93	65,51	22.17	67,66	276	756	72,36	...	...	...	16,65	13,90	1,50	...	...	17
6,728	5,202	2,994	4,361	1,765	1,661	5,400	...	...	...	5,398	1,667	2,037	...	...	18

COACHING STOCK.

(In the table below where the value of coaching stock is not shown it is included with that of Goods.)

2,969	852	239	942	63	255	993	12	82	679	164	205	...	46	1,684	19
30	1	20	37	...	...	−8	...	3	2	...	12	55	6	−5	20
2,999	853	259	1,029	63	255	985	12	84	681	164	217	55	52	1,679	21
0·04	0·06	0·03	0·05	...	0·05	0·06	...	0·13	0·09	0·07	0·04	...	0·07	...	22
0·04	0·05	0·02	0·04	...	0·04	0·07	...		0·06	0·04	0·02	...	0·03	...	23
0·04	0·05	0·01	0·04	...	0·03	...	...	...	0·10	...	0·02	...	...	...	24
0·24	0·29	0·13	0·40	...	0·31	0·39	...	0·48	0·43	0·18	0·12	...	0·26	...	25
0·24	0·20	0·15	0·14	...	0·18	0·22	...	0·48	0·25	0·13	0·06	...	0·23	...	26
0·60	0·67	0·34	0·71	0·41	0·56	0·74	2·40	1·09	0·93	0·42	0·26	0·75	0·59	0·82	27
...	5,380	36,199	49,225	...	...	25,640	...	...	...	...	...	...	13,127	...	28
...	3,623	35,486	65,373	...	...	29,716	...	...	...	...	...	...	22,457	...	29
...	3,239	34,779	75,285	...	...	...	...	...	...	...	...	...	...	...	30
...	20,203		59,939	...	...	38,463	...	...	...	...	...	...	15,782	...	31
...	14,384	20,538	43,814	...	...	29,525	...	...	...	...	...	...	10,343	...	32
52,363	46,829	30,470	48,657	...	30,264	33,895	...	...	...	45,831	53,209	...	13,777	43,999	33
143	128	83	133	...	83	93	...	...	...	126	146	...	38	121	34
41	38	23	33	...	21	26	...	...	22	31	34	...	19	30	35
239	55	39	68	16	14	92	...	14	103	10	13	...	3	124	36
1,64,48	...	22,23	...	...	785	52,07	...	...	...	8,77	...	...	...	...	37
5,040	...	3,002	...	...	1,733	3,885	...	...	...	2,241	...	...	...	...	38

GOODS STOCK.

8,076	4,884	1,215	5,711	263	298	3,530	4	223	2,848	403	602	...	79	4,619	39
2,917	...	442		69	705	903	4	814	564	382	295	...	56	2,677	40
320	646	70	279	12	22	460	...	50	143	20	...	...	8	79	41
253	47	33	35	4	23	34	...	2	50	11	36	...	...	103	42
11,566	5,577	1,812	6,025	345	1,048	4,985	8	1,089	3,605	816	533	...	142	7,477	43
56	...	10	243	...	...	160	...	...	−14	...	...	29	...	534	44
...	...	−8		−3	...	...	2	...	−13	...	...	25	*27	...	45
...	...	−8	...	2	...	−2	...	...	−29	...	...	...	...	...	46
...	2	2	2	1	...	12	...	...	8	1	8	1	...	−9	47
56	2	1	245	...	...	170	2	...	−48	1	8	55	27	532	48
8,132	4,884	1,225	5,954	263	298	3,690	4	223	2,834	403	602	29	79	5,153	49
2,917	...	439		66	705	903	6	814	551	382	295	25	*83	2,677	50
320	646	62	279	14	22	398	...	50	114	20	...	...	8	79	51
253	49	37	37	5	23	164	...	2	58	12	44	1	...	100	52
11,622	5,579	1,813	6,270	348	1,048	5,155	10	1,089	3,557	817	941	55	170	8,009	53
2·98	4·37	2·34	4·04	2·27	2·30	3·84	2·00	14·05	4·85	2·09	1·18	0·75	2·12	3·91	54
20,354	14,896	7,577	11,274	...	5,891	11,515	...	...	...	12,635	12,823	...	3,359	16,080	55
56	41	21	31	...	15	32	...	...	...	35	35	...	9	44	56
7·54	7·22	4·93	3·76	...	3·72	4·56	...	...	4·40	4·29	3·90	...	3·02	4·07	57
7·12	...	3·28		...	3·13	3·78	...	...	3·22	4·03	4·73	...	6·51	4·30	58
16·60	12·40	10·33	9·74	...	7·33	9·54	...	...	8·68	10·93	9·51	...	16·85	9·59	59
13·87	...	6·90		...	7·15	8·82	...	...	7·20	11·00	12·65	...	14·90	12·44	60
7·62	5·21	4·02	3·81	...	2·73	3·36	...	...	4·10	3·90	4·22	...	4·21	4·45	61
157	52	34	36	...	16	44	...	...	34	49	59	...	14	71	62
344	101	147	242	17	40	463	...	45	242	21	19	...	6	215	63
3,02,61	1,67,18	36,10	1,42,49	933	12,53	89,98	...	...	...	13,13	27,17	2,83	...	...	64
9,273	13,275	4,875	9,183	6,099	2,751	6,714	...	...	...	3,357	3,261	3,824	...	...	65
7,34,02	2,23,69	80,50	2,10,15	12,03	27,94	2,14,41	Information not available.	23,94	1,23,33	38,55	41,07	433	14,50	2,49,10	66
18,503	18,482	10,873	13,541	7,863	6,135	16,091		30,885	16,625	9,859	4,930	5,851	17,683	12,157	67

Number of, outlay on, and

Progressive No.	GAUGE.	3′ 3½″—*concld.*				2′ 6″.						
	NUMBER.	20 (*a*) & (*b*).	21 (*a*) to (*f*)	22 (*a*) to (*j*).	23	24	25	26	3 (*d*)	27	3 (*b*)	2 (*n*) & (*o*).
	Particulars.	R. & K.	S. I.	S. M.	U. C.	B. B. L.	B. L.	B. B.	C. B.	C.	E. B. S. M.	G. D. & E.
	ENGINES.											
	(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)											
1	Passenger engines. Number at close of 1904	...	73	...	1	...	...	...	...	...	...	...
2	Number added in 1905	...	...	...	...	...	...	...	...	...	...	...
3	Number at close of 1905	...	73	...	1	...	...	...	...	...	...	...
4	Goods and mixed engines. Number at close of 1904	40	145	238	2	...	5	3	5	...	10	11
5	Number added in 1905	...	10	−1	...	3	2	...	...	2	...	...
6	Number at close of 1905	40	155	237	2	3	7	3	5	2	10	11
7	Total number of locomotives on the 31st December.	40	228	237	3	3	7	3	5	2	10	11
8	Number per mile of line open of all classes	0·14	0·17	0·14	0·04	0·12	0·25	0·16	0·15	0·17	0·29	0·08
9	Average mileage run by each *per annum*. Passenger	7,441	30,968	19,862	...	...	...	...	...	...	14,759	...
10	Goods	8,743	15,220	17,794	...	...	...	...	...	...	10,242	...
11	All classes	20,135	22,160	20,496	19,029	1,358	25,567	9,139	17,953	6,960	11,146	11,112
12	Average mileage run by each *per diem*. Passenger	20	85	54	...	...	...	...	...	...	40	...
13	Goods	24	41	48	...	...	...	...	...	...	28	...
14	All classes	55	61	56	52	37	70	25	49	19	30	30
15	Ton-mileage hauled per engine, in thousands of tons	2,949	3,729	3,353	3,730	...	...	...	...	...	...	...
16	Average under repairs or renewals at any one time	9	23	38	...	...	...	...	...	...	2	2
17	Total value, in thousands of rupees	...	...	59,71	95	76	...	70	...	12	...	1,44
18	Total value per mile of line open	...	...	3,466	1,384	2,941	...	3,786	...	984	...	1,094
	COACHING STOCK.											
	(In the table below where the value of coaching stock is not shown it is included with that of Goods.)											
19	Number at close of 1904	180	1,063	1,053	26	...	7	24	16	...	47	54
20	Number added in 1905	4	36	...	...	13	...	...	...	3	...	...
21	Number at close of 1905	184	1,099	1,053	26	13	7	24	16	3	47	54
22	Number per mile of line open. 1st class	0·08	0·06	0·05	0·03	...	...	...	0·06	0·08	0·11	0·06
23	2nd class	0·04	0·05	0·04	0·03	...	0·23	...	0·03	...	0·06	...
24	Intermediate class	0·03	...	...	...	...	...	...	0·10	...	0·17	...
25	3rd class	0·32	0·52	0·32	0·22	...	0·09	...	0·25	0·08	0·94	0·26
26	All other classes	0·16	0·18	0·20	0·06	...	...	...	0·04	0·06	0·36	0·11
27	Total of all classes	0·63	0·81	0·61	0·37	0·50	0·32	1·30	0·48	0·25	1·64	0·43
28	Average mileage run by each *per diem*. 1st class	...	31,942	...	...	...	...	...	...	...	...	...
29	2nd class	...	42,758	...	...	...	...	...	...	...	...	...
30	Intermediate class	...	...	...	...	...	...	...	...	...	...	...
31	3rd class	...	48,827	...	...	...	...	...	...	...	...	...
32	All other classes	...	34,637	...	...	...	...	...	...	...	...	...
33	Total of all classes	34,946	43,613	29,448	31,505	...	...	...	...	4,928	...	...
34	Average mileage run by each *per diem*	96	119	80	86	...	...	...	...	14	...	...
35	Freight ton-mileage per vehicle, in thousands of tons	20	38	23	23	...	...	...	...	...	...	...
36	Average under repairs or renewals at any one time	20	67	51	2	...	2	...	2	...	6	...
37	Total value, in thousands of rupees	...	...	...	110	...	...	...	...	...	...	1·22
38	Total value per mile of line open	...	...	...	1,734	...	...	...	...	...	...	975
	GOODS STOCK.											
39	Number at close of 1904. Covered wagons	948	2,125	3,334	25	...	7	14	56	...	47	55
40	Open ,,	32	1,347	1,054	10	...	15	2	9	...	38	152
41	Timber trucks, including bolster trucks.	76	71	267	...	...	39	...	5	...	5	...
42	All other classes	15	6	206	...	...	1	12	...	...	111	2
43	Total of all classes	1,122	3,549	4,861	35	...	62	28	70	...	201	209
44	Number added in 1905. Covered wagons	67	156	366	...	6	...	...	...	...	...	...
45	Open ,,	30	46	−10	...	19	...	...	...	18	−6	...
46	Timber trucks, including bolster trucks.	...	...	...	...	...	...	...	8	...	4	...
47	All other classes	...	2	1	...	...	...	...	...	...	2	...
48	Total of all classes	97	204	357	...	25	...	...	8	18	...	...
49	Number at close of 1905. Covered wagons	1,015	2,281	3,700	25	6	7	14	56	...	47	55
50	Open ,,	113	1,393	1,044	10	19	15	2	9	18	32	152
51	Timber trucks, including bolster trucks.	76	71	267	...	...	39	...	13	...	9	...
52	All other classes	15	8	207	...	...	1	12	...	...	113	2
53	Total of all classes	1,219	3,753	5,218	35	25	62	28	78	18	201	209
54	Number of all classes per mile of line open	4·19	2·77	3·03	0·50	0·96	2·21	1·51	2·32	1·54	5·86	1·67
55	Average mileage run by each *per annum*	7,189	11,468	11,351	12,530	...	...	...	...	...	...	...
56	Average mileage run by each *per diem*	19	31	31	34	...	...	...	...	...	...	...
57	Average tare in tons. Covered wagons	3·96	4·44	4·02	4·02	...	5·90	2·75	3·32	...	2·79	...
58	Open ,,	3·46	3·73	3·28	3 22	...	5·35	2·50	2·15	2·25	4·13	...
59	Average carrying capacity in tons. Covered wagons	11·30	7·37	7·76	7·40	...	14·10	6·00	3·79	...	4·35	...
60	Open ,,	10·39	7·26	6·97	6·29	...	14·65	6·00	5·00	5·25	4·65	...
61	Average load of a goods vehicle, loaded and empty, per mile.	4·27	3·68	3·50	2·17	...	...	...	...	...	...	...
62	Freight ton-mileage per vehicle, in thousands of tons	26	46	37	23	...	...	...	...	...	...	...
63	Average under repairs or renewals at any one time	52	207	112	...	...	4	...	5	...	15	...
64	Total value, in thousands of rupees	...	...	1,08,60	58	1,28	...	1,71	...	8	...	1,45
65	Total value per mile of line open	...	...	6,304	845	4,231	...	9,232	...	723	...	1,101
66	Grand total value of rolling-stock, in thousands of rupees.	41,35	1,56,00	1,68,31	2,72	2,04	Information not available.	2,41	1,96	20	Included with E. B. S. By., 3′ 3½″ gauge.	4,16
67	Grand total value of rolling-stock per mile of line open	13,692	11,530	9,751	3,942	7,868		13,018	5,765	1,667		3,170

DIX 23—*concld.*

work done by Rolling-stock.

2′ 6″										2′ 9″						Progressive No.
1 (*b*) & (*c*)	30	9 (*g*) & (*h*)	19	1 (*c*)	1 (*d*)	20 (*e*)	32	33	6 (*f*)	9 (*i*)	35	5 (*g*)	36	37	38	
J. G. E. & E. D.	K. S.	K. K. T. & N. D.	M. B. W.	M. B.	P. L. L.	P. W. L.	B. P.	T. B.	T. K.	D. L.	D. H.	G. L.	H. A.	H. S.	J.	
ENGINES.																
(In the table below except where separately shown, the Passenger engines are included with Goods and Mixed engines.)																
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
17	13	27	7	...	3	5	4	3	...	7	18	15	7	4	7	4
2	11	3	—1	3	...	...	...	...	3	...	...	...	...	...	...	5
19	24	30	6	3	3	5	4	3	3	7	18	15	7	4	7	6
19	24	30	6	3	3	5	4	3	3	7	18	15	7	4	7	7
0·07	0·40	0·23	0·37	0·09	0·12	0·13	0·12	0·15	0·12	1·13	0·35	0·08	0·19	0·20	0·23	8
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
18,089	7,542	12,964	9,989	15,174	6,559	12,584	23,462	...	...	...	13,995	9,841	14,775	8,766	...	11
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13
49	31	35	27	36	18	35	64	...	...	...	38	27	40	24	...	14
2,510	517	...	...	706	467	...	...	...	...	...	...	...	...	...	...	15
...	3	...	1	...	1	1	1	1	...	...	2	2	...	...	...	16
...	6,55	7,31	...	69	76	...	68	...	...	...	3,22	...	1,65	65	...	17
...	11,027	5,535	...	2,129	3,081	...	2,057	...	...	...	6,323	...	4,460	3,280	...	18
COACHING STOCK.																
(In the table below where the value of coaching stock is not shown it is included with that of Goods.)																
50	78	78	54	...	8	18	25	14	...	9	91	59	56	20	19	19
6	...	2	—1	9	...	...	...	...	11	...	6	4	10	...	3	20
56	78	80	53	9	8	18	25	14	11	9	97	63	66	20	22	21
0·02	0·30	0·05	...	0·06	0·04	0·05	0·07	0·10	...	...	0·46	...	...	...	...	22
0·01	0·27	0·03	...	0·03	0·01	0·05	0·04	...	0·08	...	0·56	...	...	...	...	23
...	...	0·02	...	0·03	0·14	...	0·08	...	...	...	...	...	...	...	...	24
0·14	0·44	0·30	...	0·09	0·13	0·33	0·45	0·45	0·24	...	0·82	...	...	...	...	25
0·02	0·30	0·20	...	0·06	...	0·03	0·11	0·15	0·12	...	0·06	...	...	...	...	26
0·19	1·31	0·61	3·31	0·27	0·32	0·46	0·75	0·70	0·44	1·46	1·90	0·25	1·78	1·00	0·73	27
23,352	4,711	...	...	5,028	6,975	...	...	...	...	...	...	...	...	...	...	28
40,847	5,031	...	...	6,617	...	...	...	...	...	...	...	...	...	...	...	29
56,315	...	...	...	6,617	18,452	...	...	...	...	...	...	...	...	...	...	30
44,685	10,624	...	...	11,710	5,860	...	...	...	...	...	...	...	...	...	...	31
36,787	9,176	...	...	10,572	...	...	...	...	...	...	...	...	...	...	...	32
41,784	7,773	...	...	8,940	11,458	...	...	...	...	...	...	...	...	...	...	33
114	21	...	...	24	31	...	...	...	...	...	...	...	...	...	...	34
20	5	...	...	6	10	...	...	...	...	...	1	...	...	...	...	35
...	...	7	5	1	...	1	...	...	...	...	...	...	...	...	...	36
...	3,49	1,85	...	...	31	...	69	...	...	...	...	...	...	...	...	37
...	5,877	1,405	...	...	1,245	...	2,061	...	...	...	...	...	...	...	...	38
GOODS STOCK.																
170	70	84	20	...	2	58	20	30	...	...	37	30	14	4	42	39
30	60	335	47	...	14	...	15	18	...	...	182	55	8	4	24	40
...	...	...	...	...	...	2	...	2	...	...	6	...	...	...	...	41
...	...	23	1	...	...	11	...	...	...	326	19	101	10	...	9	42
250	130	442	68	...	16	71	35	50	...	326	244	236	32	8	75	43
...	10	...	...	4	...	...	...	...	12	...	7	...	...	...	...	44
25	...	1	...	8	...	...	6	...	12	...	—3	...	...	...	5	45
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46
2	...	—12	...	...	...	...	...	...	...	...	...	...	...	...	—4	47
50	10	—11	...	12	...	...	6	...	24	...	4	...	...	...	1	48
170	80	84	20	4	2	58	20	30	12	...	44	80	14	4	42	49
105	60	336	47	8	14	...	21	18	12	...	179	55	8	4	29	50
23	...	...	...	...	...	2	...	2	...	...	6	...	...	...	...	51
2	...	11	1	...	...	11	...	...	...	326	19	101	10	...	5	52
300	140	431	68	12	16	71	41	50	24	326	248	236	32	8	76	53
1·05	2·33	3·27	4·25	0·37	0·65	1·82	1·23	2·50	0·96	0·53	4·86	0·94	0·86	0·40	2·53	54
11,338	4,292	...	...	7,311	4,474	...	...	...	...	...	...	...	...	...	...	55
32	12	...	...	20	12	...	...	...	...	...	...	...	...	...	...	56
7·44	4·50	...	...	5·00	6·93	3·16	2·75	...	...	...	...	2·13	2·75	2·75	...	57
5·58	3·12	1·33	...	5·06	4·06	...	2·15	...	...	...	...	2·60	2·50	2·50	...	58
10·95	6·25	3·64	...	9·00	9·04	4·81	5·00	4·00	...	...	3·70	5·13	5·00	5·00	...	59
10·87		3·48	...	11·00	7·58	...	5·00	4·00	...	...	3·70	4·16	5·00	5·00	...	60
3·95	2·34	...	...	7·33	3·04	...	...	...	...	...	...	...	...	...	...	61
45	10	...	...	57	14	...	...	...	...	...	7	...	...	...	...	62
...	...	10	1	...	...	5	...	...	...	...	...	...	...	...	...	63
...	2,77	4,83	...	54	41	...	61	...	...	...	3,63	...	3,26	1,03	...	64
...	4,655	3,660	...	1,669	1,689	...	1,836	...	...	...	7,102	...	8,759	5,224	...	65
20,98	12,81	13,99	3,56	1,23	1,48	1,42	1,98	1,60	2,40	Included with North Western State railway.	6,84	5,56	4,91	1,68	2,03	66
7,361	22,250	10,598	20,941	3,844	6,015	3,641	6,005	8,021	9,600		13,412	2,224	13,270	8,040	6,767	67

APPENDIX 24.

Rolling-stock fitted with automatic brakes at close of 1905.

Numbers.		Gauge.	Railway system. (*Vide* Appendix 1.)	Locomotives.			Coaching vehicles including all brake-vans.				Goods vehicles, excluding cranes.			
Main head.	Sub-head.			Fitted.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.	Braked.	Piped.	Not fitted.	Proportion per cent. of fitted to total.
1	(*a*)	5′ 6″	Bengal-Nagpur	176	115	60·48	715	12	184	79·80	1,217	13	6,138	16·69
2	(*a*) to (*f*)	5′ 6″	Bombay, Baroda and Central India.	181	38	82·65	496	4	134	78·86	2	49	5,050	1·00
3	(*a*)	5′ 6″	Eastern Bengal State	129	57	69·35	502	44	166	76·69	...	13	4,033	0·32
4	...	5′ 6″	East Indian	457	465	51·16	1,522	92	761	67·95	285	78	17,151	1·79
5	(*a*) to (*f*)	5′ 6″	Great Indian Peninsula Indian Midland	491	382	59·66	1,721	11	556	75·70	...	165	11,782	1·38
6	(*a*) to (*c*)	5′ 6″	Madras	152	114	57·14	935	20	257	78·80	164	15	4,724	3·65
8	(*a*) & (*b*)	5′ 6″	Nizam's Guaranteed State	...	61	...	55	3	130	30·85	...	...	1,006	...
9	(*a*) to (*f*)	5′ 6″	North Western State	705	51	93·25	2,086	90	223	90·70	1,046	103	10,421	9·93
10	(*a*) & (*b*)	5′ 6″	Oudh and Rohilkhand State.	122	83	59·51	714	49	90	89·45	29	10	5,523	0·70
11	...	5′ 6″	Assam-Bengal	68	9	88·31	245	2	12	95·37	102	7	1,689	5·06
12	...	5′ 6″	Bengal and North-Western	65	175	27·08	362	2	665	35·37	...	...	6,251	...
13	...	5′ 6″	Bengal Docars	...	10	...	...	...	63	...	...	...	345	...
14	...	5′ 6″	Bhavnagar-Gondal-Junagad-Porbandar.	...	37	...	...	...	255	...	...	...	1,046	...
15	...	5′ 6″	Burma	144	107	57·37	421	34	530	46·29	155	9	4,961	3·20
16	...	5′ 6″	Deoghur	...	2	...	...	...	12	...	...	...	10	...
17	...	5′ 6″	Dibru-Sadiya	...	22	...	...	...	84	...	...	...	1,088	...
3	(*b*) & (*c*)	3′ 3½″	Eastern Bengal State	106	31	77·37	440	42	199	70·78	...	2	3,542	0·06
8	(*c*)	3′ 3½″	Hyderabad-Godavari Valley.	...	55	...	3	...	161	1·83	...	...	315	...
18	...	3′ 3½″	Jodhpur-Bikaner	...	48	...	...	1	216	0·46	...	...	941	...
19	...	3′ 3½″	Morvi	...	4	...	...	...	55	...	...	...	55	...
6	(*d*) & (*e*)	3′ 3½″	Nilgiri and Shoranur-Cochin	6	12	33·33	12	1	39	25·00	21	...	149	12·35
2	(*g*) to (*m*)	3′ 3½″	Rajputana-Malwa	45	403	10·04	97	85	1,547	7·86	...	...	7,982	...
20	(*a*) & (*b*)	3′ 3½″	Rohilkund and Kumaon	10	30	25·00	...	...	184	...	...	...	1,211	...
21	...	3′ 3½″	South Indian	48	180	21·05	210	2	887	19·29	...	...	3,745	...
22	...	3′ 3½″	Southern Mahratta	42	195	17·72	106	3	944	10·35	...	...	5,197	...
23	...	3′ 3½″	Udaipur-Chitor	...	3	...	...	...	26	...	...	...	35	...
24	...	2′ 6″	Baraset-Basirhat Light	...	3	...	...	...	13	...	...	...	25	...
25	...	2′ 6″	Barsi Light	...	7	...	...	...	7	...	...	...	61	...
26	...	2′ 6″	Bukhtiarpore-Behar Light	...	3	...	...	...	24	...	...	...	28	...
3	(*d*)	2′ 6″	Cooch Behar including 2′ 6″ gauge branches of Eastern Bengal State Railway.	...	15	...	...	...	63	...	...	...	279	...
27	...	2′ 6″	Cutch	...	2	...	...	...	3	...	...	...	18	...
2	(*n*) & (*o*)	2′ 6″	Gackwar's Dabhoi and Rajpipla.	...	11	...	...	...	54	...	...	...	209	...
1	(*b*) to (*e*)	2′ 6″	Jubbulpore-Gondia, Mourbhanj, Parlakimedi Light and Raipur-Dhamtari.	12	13	48·00	34	...	39	46·57	223	...	105	67·99
30	...	2′ 6″	Kalka-Simla	24	...	100·00	78	...	...	100·00	79	61	...	100·00
9	(*g*) & (*h*)	2′ 6″	Khushalgarh-Kohat-Thal and Nowshera-Dargai.	...	30	...	...	...	80	...	...	...	431	...
19	...	2′ 6″	Morvi	...	6	...	...	...	53	...	...	...	68	...
20	(*c*)	2′ 6″	Powayan Light	...	5	...	...	...	18	...	...	...	71	...
32	...	2′ 6″	Tarakeshwar-Magra Light	...	4	...	...	...	25	...	...	...	41	...
33	...	2′ 6″	Tezpore-Balipara Light	...	3	...	...	...	14	...	...	...	50	...
6	(*f*)	2′ 6″	Tirupattur-Krishnagiri	3	...	100·00	...	...	11	...	...	...	24	...
9	(*i*)	2′ 0″	Dandot Light	...	7	...	...	...	19	...	...	...	326	...
35	...	2′ 0″	Darjeeling-Himalayan	...	18	...	...	...	97	...	...	...	248	...
5	(*g*)	2′ 0″	Gwalior Light	...	15	...	...	...	63	...	...	...	236	...
36	...	2′ 0″	Howrah-Amta Light	...	7	...	...	...	66	...	...	...	32	...
37	...	2′ 0″	Howrah-Sheakhala Light	...	4	...	...	...	20	...	...	...	8	...
28	...	2′ 0″	Jorhat State	...	7	...	...	...	22	...	...	...	76	...
			Total	3,016	2,799	51·87	10,754	447	9,051	55·28	3,273	525	107,226	3·42

APPENDIX 25.

Rolling-stock lighted by gas and electricity at close of 1905.

Numbers.		Gauge.	Railway system. (*Vide* Appendix I.)	Number of coaching vehicles fitted for lighting with			Number of coaching vehicles not fitted.	Proportion per cent. of fitted to total.	Remarks.
Main head.	Sub-head.			Gas.	Electricity.	Total.			
1	(*a*)	5′ 6″	Bengal-Nagpur	665	1	666	194	77·44	
2	(*a*) to (*f*)		Bombay, Baroda and Central India	405	2	407	7	98·31	
3	(*a*)		Eastern Bengal State	484	1	485	220	68·79	
4	...		East Indian	1,376	3	1,379	246	84·86	
5	(*a*) to (*f*)		Great Indian Peninsula Indian Midland	1,368	29	1,397	80	94·58	
6	(*a*) to (*c*)		Madras	1,001	...	1,001	184	84·47	
8	(*a*) & (*b*)		Nizam's Guaranteed State	119	...	119	61	66·11	
9	(*a*) to (*f*)		North Western State	1,851	...	1,851	285	86·66	
10	(*a*) & (*b*)		Oudh and Rohilkhand State	683	1	684	169	80·19	
11	...		Assam-Bengal	227	...	227	6	97·42	
12	...		Bengal and North-Western	...	...	...	1,029	...	
13	...		Bengal Dooars	...	...	...	63	...	
14	...		Bhavnagar-Gondal-Junagad-Porbandar	...	...	...	255	...	
15	...		Burma	...	20	20	896	2·18	
16	...		Deoghur	...	...	...	12	...	
17	...		Dibru-Sadiya	...	...	...	84	...	
3	(*b*) & (*c*)		Eastern Bengal State	485	...	485	191	71·75	
8	(*c*)	3′ 3¾″	Hyderabad-Godavari Valley	114	...	114	50	71·26	
18	...		Jodhpur-Bikaner	...	80	80	130	38·10	
19	...		Morvi	...	...	...	55	...	
6	(*d*) & (*e*)		Nilgiri and Shoranur-Cochin	...	...	...	52	...	
2	(*g*) to (*m*)		Rajputana-Malwa	...	340	340	1,306	20·66	
20	(*a*) & (*b*)		Rohilkund and Kumaon	...	...	...	184	...	
21	...		South Indian	...	99	99	881	10·10	
22	...		Southern Mahratta	970	...	970	55	94·63	
23	...		Udaipur-Chitor	...	...	...	26	...	
24	...	2′ 6″	Barasat-Basirhat Light	...	...	...	13	...	
25	...		Barsi Light	...	...	...	7	...	
26	...		Bukhtiarpore-Behar Light	...	...	...	24	...	
3	(*d*)		Cooch Behar including 2′ 6″ gauge branches of Eastern Bengal State Railway.	...	...	...	63	...	
27	...		Cutch	...	...	...	3	...	
2	(*n*) & (*o*)		Gaekwar's Dabhoi and Rajpipla	...	...	...	54	...	
1	(*b*) to (*e*)		Jubbulpore-Gondia, Mourbhanj, Parlakimedi Light and Raipur-Dhamtari.	34	...	34	39	46·58	
30	...		Kalka-Simla	...	72	72	6	92·30	
9	(*g*) & (*h*)		Khushalgarh-Kohat-Thal and Nowshera-Durgai.	...	...	...	80	...	
19	...		Morvi	...	...	...	53	...	
20	(*c*)		Powayan Light	...	...	...	18	...	
32	...		Tarakeshwar-Magra Light	...	...	...	25	...	
33	...		Tezpore-Balipara Light	...	...	...	14	...	
6	(*f*)		Tirupattur-Krishnagiri	...	...	...	11	...	
9	(*i*)	2′ 0″	Dandot Light	...	...	...	9	...	
35	...		Darjeeling-Himalayan	...	...	...	97	...	
5	(*g*)		Gwalior Light	...	...	...	63	...	
36	...		Howrah-Amta Light	...	...	...	66	...	
37	...		Howrah-Sheakhala Light	...	...	...	20	...	
38	...		Jorhat State	...	...	...	22	...	
			Total	9,782	648	10,430	7,408	58·47	

APPENDIX 26.

Railways on which points and signals were interlocked and on which block instruments were used for train signalling at close of 1905.

Number.		Gauge.	Railway system. (*Vide* Appendix I.)	Total number of stations on railway.	Stations at which points and signals were interlocked.		Stations at which block instruments were used for train signalling.	
Main head.	Sub-head.				No.	Name of system of interlocking.	No.	Name of block instrument.
1	(*a*)		Bengal-Nagpur	233	93	90 List and Morse's. 3 Experimental.	16	4 Webb and Thomson's. 12 Theobald's Train Key.
2	(*a*) to (*f*)		Bombay, Baroda and Central India	132	30	22 Mackenzie and Holland's. 8 Experimental.	82	58 Preece's single wire semaphore. Does not give out a token or tablet. 24 Experimental.
3	(*a*)		Eastern Bengal State	129	33	22 Ordinary double line interlocking. 11 Experimental.	22	Pryce and Ferreira's. Token not necessary.
4	...		East Indian	378	179	98 English system. 80 Dutton's. 1 Experimental.	126	75 Pryce and Ferreira's. Token not necessary. 37 Tyer's Tablet. 14 Experimental.
5	(*a*) & (*b*)	5′ 6″	Great Indian Peninsula	260	64	43 English system. 18 List and Morse's. 3 Experimental.	260	205 Preece's. Does not give out a token or tablet. At some of these stations two kinds of instruments are used. 65 Neal's.
5	(*c*) to (*f*)		Indian Midland	148	17	11 Wrench's. 5 English system. 1 Experimental.	31	Preece's. Does not give out a token or tablet.
6	(*a*) to (*c*)		Madras	304	58	37 List and Morse's. 21 Experimental.	211	106 Winter's Block with starting semaphores. Does not give out a token or tablet. 20 Winter's Block without starting semaphores. Does not give out a token or tablet. 85 Theobald's Train Key.
8	(*a*) & (*b*)		Nizam's Guaranteed State	45	1	Dutton's	...	.....
9	(*a*) to (*f*)		North Western State	578	318	267 List and Morse's. 28 Tappet. 20 Key locking. 3 Experimental.	6 32	6 Tyer's Tablet. 26 Tyer's double line block instruments.
10	...		Oudh and Rohilkhand State	182	110	103 List and Morse's. 7 Experimental.	2	1 Tyer's Tablet. 1 Neal's Patent Voucher.
11	...		Assam-Bengal	117	...	.....	...	.....
12	...		Bengal and North-Western	276	...	.....	...	.....
13	...		Bengal Docars	29	...	.....	...	.....
14	...		Bhavnagar-Gondal-Junagad-Porbandar	64	2	Experimental.	...	.....
15	...		Burma	230	16	12 List and Morse's. 4 Experimental.	6	2 Tyer's Tablet. 2 Neal's. 2 Theobald's Train Key.
16	...		Deoghur	1	...	.....	...	.....
17	...		Dibru-Sadiya	18	...	.....	...	.....
3	(*b*) & (*c*)		Eastern Bengal State	138	20	19 List and Morse's. 1 Experimental.	20	Tyer's Tablet.
8	(*c*)		Hyderabad-Godavari Valley	47	41	List and Morse's.	...	.....
18	...		Jodhpur-Bikaner	85	...	.....	...	.....
19	...	3′ 3¾″	Morvi	12	...	.....	...	.....
6	(*d*) & (*e*)		Nilgiri and Shoranur-Cochin	29	...	.....	12 6	6 Winter's Block with starting semaphores. Does not give out a token or tablet. 6 Theobald's Train Key.
2	(*g*) to (*m*)		Rajputana-Malwa	291	99	87 Sydney Jones'. 12 Experimental.	20	17 Tyer's Tablet. 3 Experimental.
20	(*a*) & (*b*)		Rohilkund and Kumaon	47	1	Experimental.	...	.....
21	...		South Indian	236	33	25 List and Morse's. 5 Dutton's. 3 Experimental.	24	Winter's Block and Ticket issuing.
22	...		Southern Mahratta	243	...	.....	104	100 Winter's. Does not give out a token or tablet. 4 Theobald's Train Key.
23	...		Udaipur-Chitor	7	...	.....	...	.....
24	...		Baraset-Basirhat Light	11	...	.....	...	.....
25	...		Barsi Light	5	...	.....	...	.....
26			Bukhtiarpore-Behar Light	7	...	.....	...	.....
3	(*d*)		Cooch Behar	9	...	.....	...	.....
27	...		Cutch	2	...	.....	...	.....
2	(*n*) & (*o*)		Gaekwar's Dabhoi and Rajpipla	29	1	Country made	...	.....
1	(*b*) to (*e*)		Jubbulpore-Gondia, Mourbhanj, Parlakimedi Light and Raipur-Dhamtari.	49	...	.....	...	.....
9	(*g*) & (*h*)	2′ 6″	Khushalgarh-Kohat-Thal and Nowshera-Darzai.	21	...	.....	...	.....
30	...		Kalka-Simla	20	...	.....	...	.....
20	(*c*)		Powayan Light	8	...	.....	...	.....
24	...		Tarakeshwar-Magra Light	17	...	.....	...	.....
33	...		Tezpore-Balipara Light	8	...	.....	...	.....
6	(*f*)		Tirupattur-Krishnagiri	6	...	.....	...	.....
35	...		Darjeeling-Himalayan	11	...	.....	...	.....
5	(*g*)		Gwalior Light	23	...	.....	...	.....
36	...	2′ 0″	Howrah-Amta Light	18	...	.....	...	.....
37	...		Howrah-Sheakhala Light	12	...	.....	...	.....
38	...		Jorhat	8	...	.....	...	.....
			Total	4,523	1,116	.....	968	

APPENDIX 27.

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905.

Number.	By. system, vide App. I.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	SOURCES OF SUPPLY. Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.) Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
	B. C.	1901	Bengal	162	...	...	...	...	8,710	6·20	3·00	...	...	...	52·05	41·75	1,283·43	172·62	
		1902		162	...	...	...	...	8,466	6·27	3·00	...	...	...	51·47	41·24	1,368·09	201·02	
		1903		162	...	...	...	...	10,623	6·00	3·00	...	...	...	51·10	41·10	1,278·70	256·13	
		1904		162	...	...	...	...	9,789	5·67	3·00	...	...	...	51·24	40·35	1,113·51	186·82	
		1905				Amalgamated with the Eastern Bengal State railway.													
1 (a)	B. N.	1901	Bengal and Umaria	331	...	...	...	...	95,231	6·26	2·50	...	...	...	57·99	51·92	826·90	178·95	
		1902		321	...	...	...	...	113,180	4·29	2·48	103	5·60	5·60	59·84	53·37	759·43	178·58	
		1903		283	...	...	...	...	134,066	3·71	2·43	206	4·20	...	65·95	57·33	775·46	199·42	
		1904		228	...	...	...	...	148,725	5·52	2·58	219	...	...	67·95	58·65	754·68	200·80	
		1905		219	...	...	...	...	177,960	5·16	2·34	237	...	...	71·81	61·15	648·19	198·34	
1 (b)	J. G. E.	1901	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1903		603	...	...	...	...	191	7·63	2·12	...	...	...	64·35	60·52	1,135·88	393·30	
		1904		617	...	...	...	...	3,165	10·31	2·46	...	...	...	56·20	47·63	1,178·53	344·98	
		1905		620	...	...	...	...	5,706	10·18	2·28	...	...	...	54·33	45·53	983·05	300·75	
1 (c)	M. B.	1905	Bengal	188	...	...	...	...	417	4·69	2·28	...	...	...	24·01	23·63	1,265·94	440·05	
1 (d)	P.L. L.	1901	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		603	...	...	...	...	350	7·96	2·37	...	...	...	41·56	39·06	...	...	
		1903		567	...	...	...	...	362	7·40	3·12	...	...	...	44·43	42·06	5,545·54	664·51	
		1904		495	...	...	...	...	361	8·70	2·46	...	...	...	44·19	42·38	3,873·00	627·00	
		1905		495	...	...	...	...	354	8·52	2·28	...	...	...	43·34	40·30	2,685·67	542·19	
1 (e)	R. D.	1901	Bengal	481	...	...	...	...	599	8·06	2·38	...	...	...	22·70	22·11	1,282·31	367·28	
		1902		480	...	...	...	...	554	6·41	2·37	...	...	...	23·31	22·75	1,266·15	378·98	
		1903		463	...	...	...	...	683	6·07	2·12	...	...	...	26·61	26·35	1,486·37	437·75	
		1904		443	...	...	...	...	785	8·12	2·46	...	...	...	29·43	29·08	1,168·36	403·60	
		1905		442	...	...	...	...	856	7·95	2·28	...	...	...	30·89	30·41	1,091·26	369·67	
2 (a) to (f)	B., B.& O.I.	1901	England, Bengal and Singareni.	138	...	5	27·00	...	77,916	16·13	...	2,049	3·80	...	60·26	51·16	524·84	155·57	
		1902		129	...	7,477	20·00	...	65,559	15·98	...	2,063	3·27	...	58·11	48·99	543·66	154·30	
		1903		121	...	10,384	19·38	...	63,172	14·56	...	2,226	3·00	...	57·58	48·16	514·46	148·09	
		1904		129	...	13,545	19·62	...	67,666	12·92	...	2,344	3·00	...	59·27	49·22	536·53	152·36	
		1905		148	...	12,621	16·87	...	75,769	12·53	...	2,494	3·06	...	57·81	48·43	514·00	149·33	
2 (n) & (o)	G.D. & R.	1901	England and Bengal.	...	...	...	...	...	1,245	...	...	54	...	...	25·65	25·48	...	...	
		1902		...	...	...	...	...	1,089	...	...	24	...	...	24·18	24·02	...	...	
		1903		...	...	...	...	...	1,417	...	...	70	...	...	25·50	25·17	...	...	
		1904		...	...	...	...	...	1,246	...	...	33	...	...	25·39	25·12	...	...	
		1905		...	...	...	...	...	1,384	...	...	207	...	...	27·05	26·90	...	...	
3 (a)	E.B S.	1901	Bengal	186	...	...	...	...	65,477	5·93	2·80	...	...	...	71·66	51·09	1,008·11	226·09	
		1902		167	...	...	...	...	67,891	6·10	3·48	...	...	...	69·86	49·57	889·42	209·53	
		1903		156	...	...	...	...	69,266	5·65	2·61	...	...	...	72·02	50·20	919·95	212·73	
		1904		152	...	...	...	...	69,974	5·02	2·39	...	...	...	72·78	49·11	863·33	206·85	
		1905		150	...	...	...	...	90,396	4·82	2·48	...	...	...	73·38	53·59	975·41	232·28	
3 (b) and (c)	E. B. S.	1901	Bengal and Assam.	303	...	...	...	...	40,271	8·71	3·69	...	...	...	39·75	32·18	920·93	229·57	
		1902		291	...	...	...	...	42,838	9·82	5·14	...	...	...	42·62	34·31	898·88	235·43	
		1903		280	...	...	...	...	47,247	8·52	3·78	...	...	...	44·07	35·65	844·88	229·44	
		1904		285	...	...	...	...	49,891	6·09	3·75	...	...	...	45·84	36·77	872·27	231·02	
		1905		281	...	...	...	...	48,662	6·06	4·32	...	...	...	46·33	36·52	805·30	227·73	
3 (d)	C.B.	1901	Bengal and Assam.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		407	...	...	...	...	785	10·69	4·78	...	...	...	29·95	19·13	...	...	
		1903		85	...	...	...	...	960	9·86	9·04	...	...	...	23·76	21·20	...	...	
		1904		72	...	...	...	...	1,271	9·45	2·49	...	...	...	36·36	30·57	...	...	
		1905		75	...	...	...	...	587	9·77	9·11	...	...	...	17·53	14·61	...	...	
...	E.C.	1901	...	Transferred partly to the Bengal-Nagpur and partly to the Madras railways.															
4	E.I.	1901	Bengal and Umaria.	245	...	...	...	...	474,034	4·00	1·91	...	...	...	63·05	50·47	470·61	164·71	
		1902		260	...	...	...	...	481,247	4·18	1·96	...	...	...	63·92	50·76	503·10	161·43	
		1903		256	...	...	...	...	476,581	4·19	2·00	...	...	...	65·75	51·97	457·12	151·16	
		1904		244	...	...	...	...	468,271	4·05	1·97	...	...	...	66·47	51·66	406·33	137·59	
		1905		245	...	...	...	...	505,916	4·01	1·92	...	...	...	69·75	52·07	431·67	145·77	

APPENDIX 27—*contd.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905—contd.

Number.	By. system, *vide* App. I.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages). Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Cost per ton. Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight	Cost per ton. Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of 1 ton of coal to 2½ tons of wood.) Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
5 (a) to (f)	G. I.P.	1901 1902 1903 1904 1905	England, Bengal, Singareni, Umaria, Nerbudda and Warora.	318 294 327 304 304	... ...	... 303 ... 202 329	... ...	... 12·87 ... 18·54 16·64	381,380 425,936 456,794 453,917 453,414	8·57 8·38 8·47 8·39 9·25	6·18 5·98 6·07 6·45 7·37	4,349 4,515 4,439 5,117 4,896	... ...	2·62 3·81 3·91 3·58 3·51	66·60 66·79 68·43 68·91 67·13	57·86 58·11 59·65 60·50 59·09	764·21 719·69 798·03 776·00 755·75	198·21 193·63 206·92 205·09 200·52	
5 (g)	G. L.	1901 1902 1903 1904 1905	Bengal and Mohpani.	... ... 750 735 535	... ...	... ...	... ...	... ...	886 1,400 1,617 1,990 2,558	... ... 16·00 13·28 13·62	... ... 2·75 3·25 3·75	16 ... 14 24 27	... ...	... ...	37·71 35·03 38·30 36·13 41·73	35·99 35·03 36·00 34·10 38·81	... ...	... ...	
6 (a) to (c)	M.	1901 1902 1903 1904 1905	England, Bengal and Singareni.	434 313 333 191 352	15 14 27 38 24	125 ... ... 4 ...	32·90 ... ... 31·32 ...	12·50 ... ... 28·49 ...	94,484 97,546 112,647 130,755 156,312	13·52 10·32 10·29 10·82 10·23	4·04 5·25 5·12 8·95 5·15	94,503 108,529 96,577 59,148 42,059	5·74 4·97 4·97 4·81 4·48	5·42 4·68 4·42 4·01 3·98	68·66 68·64 73·02 70·78 74·96	54·19 57·65 60·89 58·69 63·35	882·19 974·72 1,063·81 946·28 874·82	212·76 227·03 240·40 224·48 221·69	
6 (d) to (f)	N. S. C. & T. K.	1901 1902 1903 1904 1905	England, Bengal and Singareni.	328 241 688 148 207	... 16 18 21 24	1,510 1,875 1,662 2,430 2,547	38·03 31·67 29·00 25·35 21·38	12·50 *27·57 *29·17 *22·54 20·58	5 ... 11 133 284	18·45 ... 13·60 14·34 12·48	4·04 ... 5·12 8·95 5·15	385 3,315 5,889 5,116 4,502	4·00 4·43 4·61 4·48 4·62	... 4·09 4·25 4·04 4 1 2	88·82 66·39 61·42 61·30 60·50	85·85 66·39 54·08 54·18 52·25	1,410·33 4,399·75 2,409·43 2,605 63 2,637·03	1,302·99 654·46 369 85 423·49 424·78	* Including sea freight from England.
8 (a) & (b)	N. G. S.	1901 1902 1903 1904 1905	Singareni	102 103 132 132 84	... ...	... ...	... ...	... ...	29,307 30,315 26,967 26,276 24,900	... ... 6·27 6·27 5·81	4·60 4·66 4·50 4·50 4·68	... ... 250 203 ...	... ... 5·28 5·83 ...	... ... 3·25 4·14 ...	63·54 67·00 61·02 61·08 57·30	54·15 56·75 51·91 50·87 48·19	587·37 567·37 547·72 523·22 516·05	174·21 173·81 160·95 158·74 154·58	
8 (c)	H. G. V.	1901 1902 1903 1904 1905	Singareni	321 341 347 347 291	... ...	... ...	... ...	... ...	13,851 14,442 14,610 14,309 16,686	7·19 6·98 10·00 9·82 8·90	4·50 4·86 6·62 5·56 4·76	... ... 265 205 ...	... ... 4·60 10·52 ...	... ... 5·56 ...	41·08 40·12 39·66 40·86 39·50	37·73 36·11 35·55 36·85 35·70	1,189·82 1,026·21 1,031·64 966·72 525·63	231·26 219·62 217·01 205·73 201·96	† Includes Nowahara-Durgal railway during the first-half of 1901. ‡ Of Bengal coal only. § Bengal coal *vid* Kiamari Rs. 13·63 and *vid* Ghaziabad Rs. 15·44. ‖ Bengal coal from Rs. 2·37 to Rs. 3·00 and Khost and Dandot coal between Rs. 7 and Rs. 13 and Khost patent fuel at Rs. 20. ¶ Bengal coal, *vid* Kiamari Rs. 12·00 and *vid* Ghaziabad Rs. 14·88. ** Bengal coal from Rs. 2·06 to Rs. 3·60 and Khost and Dandot coal between Rs. 7 and Rs. 13. †† There was no importation of foreign coal during 1904 and 1905. ‡‡ Bengal coal *vid* Kiamari Rs. 11·03 and *vid* Ghaziabad Rs. 14·82. (a) Bengal coal *vid* Kiamari Rs. 11·03 and *vid* Ghaziabad Rs. 13·84. §§ Bengal coal from Rs. 1·94 to Rs. 2·25, Chita Dand coal Rs. 11·22 and Khost and Dandot coal between Rs. 6·98 and Rs. 13. (b) Bengal coal from Rs. 1·94 to Rs. 3·37 and Khost and Dandot coal between Rs. 8·04 and Rs. 13·27. ||| The figures against 1901 are for second-half only, those for the first-half are included with the North Western State railway.
9 (d) to (f)	N. W‖	1901 1902 1903 1904 1905	England, Bengal, Dandot, Bhagan-wala and Khost.	‡838 ‡838 ‡838 ‡838 ‡838	... ...	11,074 7,206 3,736 ††650 ††2,373	... ... †† ††	22·27 20 61 19·00 †† ††	194,134 248,279 258,111 370,454 431,520	‡16·81 § ¶ ‡‡ (a)	5·38 ‖ ** §§ (b)	180,521 122,323 216,097 163,151 76,336	5·21 ... 5·31 5·35 ...	... ...	51·24 52·24 52·72 57·16 59·82	44·95 46·36 46·47 50·12 52 16	520·93 593·84 557·78 481·27 541·06	149·71 160·45 155·74 156·98 172·02	
9 (g) & (h)	K. K. T. & N. D. ‖‖	1901 1902 1903 1904 1905	Bengal and Dandot.	... ...	... ...	... ... 12 ...	... ... †† ...	... ... †† ...	407 1,235 2,788 2,731 2,726	... ... ‡‡ (a)	... ... §§ (b)	97 180 192 270 132	... ... 5·35 ...	... ...	27·25 26·75 25·16 21·34 19·72	21·71 22·32 21·45 17·83 16·08	1,824·83 2,072·38 2,362·43 1,882·21 1,243 44	310·27 318·41 435·46 335·28 301·98	
10 (a) & (b)	O & E.	1901 1902 1903 1904 1905	Bengal	523 674 595 603 603	... ...	... ...	... ...	... ...	93,868 98,775 108,040 119,278 131,445	10·39 9·38 7·76 7·46 7·83	2·97 2·53 2·15 2·13 2·13	... ...	... ...	... ...	51·04 51·68 54·81 55·39 59·17	43·60 44·36 46·99 47 68 50·26	784·95 819·01 849·59 791·59 919·40	172·47 172 31 177·85 179·43 192·35	
11	A. B.	1901 1902 1903 1904 1905	Bengal and Assam.	106 105 120 120 156	... ...	... ...	... ...	... ...	10,731 13,661 15,682 22,837 31,778	10·22 9·25 7·92 7·64 7·43	... ...	1,627 2,715 1,918	1·72 1·57 1·45	... ...	39·09 43·52 43·06 43·89 47·94	32·95 37·21 36·78 36·02 38·93	734·11 1,011·99 903·35 913·92 1,063·16	184·88 223·73 242·24 235·17 265·00	
12	B. & N. W.	1901 1902 1903 1904 1905	Bengal.	228 252 250 248 280	27 25 25 18 18	... ...	... ...	... ...	58,173 71,240 87,652 97,633 97,426	5·99 6·11 5·61 5·51 5·55	3·19 3·04 2·73 2·41 2·43	3,823 2,766 4,733 1,147 303	3·95 4·22 4·28	3·95 4·22 4·28 4·65 4·65	39·33 38·09 40·95 52·62 47·86	33·67 33 16 41·73 43·32 39·26	713·59 831·31 825·63 830·78 850·35	208·14 210 21 223·02 238·20 222·97	

APPENDIX 27—*contd.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905—contd.

Ry. system, *vide* App. I.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.) Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs	Rs.		Rs.	Rs.					
3	B. D.	1901	Bengal	*	...	...	...	...	2,789	15·84	...	...	...	...	49·97	41·10	...	...	*Prices are given at the place of delivery which is the place of storage.
		1902				...	...	...	2,496	12·33	2·75	...	...	...	40·16	33·92	...	...	
		1903				...	...	...	3,023	11·22	...	...	...	...	31·35	29·83	...	...	
		1904				...	...	...	3,474	10·60	...	...	...	...	30·14	28·05	...	...	
		1905				...	...	...	3,652	10·67	...	...	...	...	30·52	28·78	...	...	
	B. G. J. P.	1901	Eng-land, Bengal and Palana.	61	...	254	...	...	6,940	18·69	...	79	10·87	...	31·19	28·57	737·67	183·69	
		1902		52	...	1,494	23·23	...	4,966	18·00	...	74	8·88	...	29·77	27·45	913·30	174·64	
		1903		54	...	813	23·24	...	6,027	15·44	...	80	7·73	...	30·26	27·32	800·61	170·38	
		1904		*53	...	2	23·23	...	7,531	14·13	...	86	7·50	...	31·20	28·37	774·69	173·11	
		1905		52	...	5	23·23	...	8,010	14·07	...	83	7·50	...	32·05	29·03	816·07	179·85	
5	B.	1901	Eng-land, Bengal and Burma.	131	...	...	...	...	70,376	14·88	...	43,302	3·53	...	54·67	44·74	1,013·12	289·08	
		1902		120	...	3,114	26·75	...	63,124	12·57	...	55,474	3·95	...	52·32	42·54	972·47	3 55·40	
		1903		109	...	968	21·36	...	72,740	10·63	...	66,406	3·81	...	51·98	42·70	1,087·55	258·16	
		1904		128	...	599	21·22	...	78,834	10·47	...	52,977	4·54	...	49·98	41·43	981·89	240·27	
		1905		150	...	348	21·21	...	95,711	10·33	...	28,903	5·06	...	50·38	41·49	959·94	237·11	
3	D.	1901	Bengal	118	...	...	...	...	382	5·31	...	...	...	...	56·41	56·41	...	...	
		1902		...	...	...	...	...	400	5·62	3·00	...	...	...	61·37	61·37	...	...	
		1903		...	...	...	...	...	393	4·06	...	...	...	...	56·55	56·55	...	...	
		1904		...	...	...	...	...	501	5·50	2·25	...	...	...	71·30	...	...	...	
		1905		...	...	Information not available			...	...	...	...	...	...	...	...	...	...	
7	D. S.	1901	Assam	*	...	...	...	...	4,834	8·50	...	21	2·36	...	45·54	30·08	...	...	
		1902				...	...	...	4,616	8·50	8·50	26	2·08	1·23	51·64	36·75	...	...	
		1903				...	...	...	3,983	8·50	8·50	12	2·56	2·00	43·67	29·46	...	...	
		1904				...	...	...	4,838	8·50	8·50	10	1·71	1·71	51·88	33·39	...	...	
		1905				...	...	...	5,012	8·50	8·50	4	2·22	2·22	49·79	32·06	...	...	
9	J. B.	1901	Bengal and Palana.	665	...	...	...	...	13,551	...	4·47	2,791	...	4·62	42·38	40·20	928·57	240·94	
		1902		467	...	...	...	...	18,231	11·59	5·55	4,981	...	4·34	47·63	45·42	1,060·85	261·76	
		1903		358	...	...	...	...	22,420	11·98	7·36	120	4·38	...	52·50	49·61	1,018·95	267·31	
		1904		344	...	...	...	...	27,832	10·84	6·13	152	3·62	3·62	50·31	55·34	1,137·75	297·67	
		1905		651	...	...	...	...	24,689	11·27	5·30	155	3·90	3·90	51·51	48·39	876·54	246·73	
1	M. R. W.	1901	England and Bengal.	386	...	2	34·80	26·80	2,125	25·67	17·00	22	13·06	...	28·69	27·99	...	...	† This distance is by rail; the distance by sea is 637 miles.
		1902		†386	...	...	...	...	1,622	23·74	15·74	21	7·50	7·50	24·25	23·63	...	...	
		1903		29	...	...	...	...	1,541	21·20	12·35	30	10·66	10·66	24·27	23·22	...	...	
		1904		†386	...	...	...	...	1,777	17·51	11·04	53	8·27	8·27	24·26	23·06	...	...	
		1905		445	...	...	...	...	1,796	18·34	16·25	62	4·77	4·77	32·47	31·55	...	...	
7) 9)	R. M.	1901	Eng-land, Bengal and Singa-reni.	720	...	260	...	...	118,778	18·23	6·84	2,900	5·00	...	39·17	34·49	415·75	160·57	
		1902		722	...	...	...	...	113,360	16·57	5·74	2,183	5·00	5·00	39·84	34·63	447·79	164·80	
		1903		725	...	...	...	...	95,725	15·79	6·03	2,615	5·00	5·00	37·60	31·98	474·48	161·48	
		1904		792	...	...	...	...	109,754	14·39	4·20	2,481	5·00	5·00	38·08	32·62	496·28	169·95	
		1905		780	...	...	...	...	134,200	14·15	4·03	2,955	5·00	5·00	40·27	34·74	485·11	171·85	
9	R. & K.	1901	Bengal	677	...	...	...	...	1,106	14·65	3·54	16,302	3·24	...	28·26	22·93	614·42	172·87	
		1902		677	...	...	...	...	2,068	13·52	2·56	17,503	...	3·18	32·00	25·38	631·90	188·86	
		1903		677	...	...	...	...	1,792	11·46	2·37	17,105	...	3·27	30·91	25·25	613·37	173·58	
5)		1904		606	...	...	...	...	1,719	13·63	3·00	10,673	...	3·47	32·25	26·28	632·13	183·96	
		1905		605	...	...	...	...	8,942	11·03	2·35	8,923	...	2·94	43·29	34·79	794·75	237·60	
1	P. W. L.	1901	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	1,440	...	3·05	21·03	19·91	...	...	
		1903		...	...	...	...	...	...	...	...	1,226	...	3·26	19·03	17·81	...	...	
		1904		...	...	...	...	...	...	...	...	1,400	...	...	21·31	19·26	...	...	
		1905		655	...	...	...	...	24	11·03	2·35	1,303	...	3·59	20·89	19·41	...	...	
	S. L	1901	Bengal and Singa-reni.	60	...	...	...	...	55,120	13·25	...	1,343	4·50	...	34·59	31·66	823·48	201·19	
		1902		63	...	...	...	...	53,273	13·11	...	10,732	5·01	...	36·44	33·19	822·47	209·97	
		1903		82	...	...	...	...	60,096	12·18	...	10,516	4·91	...	37·71	34·23	774·08	205·48	
		1904		88	...	...	...	...	68,690	11·40	...	11,295	4·99	...	38·21	34·79	849·61	†213·52	
		1905		81	...	...	...	...	72,314	11·39	...	9,477	5·01	...	36·90	33·74	802·70	200·51	

APPENDIX 27—*concld.*

Coal and wood fuel consumed by each railway (by systems) and price paid per ton during the calendar years 1901 to 1905—concld.

Number.	Ry. system, *vide* App. I.	Calendar year.	SOURCES OF SUPPLY. Name. (The name of the sources of supply is for coal only. Wood was supplied from various sources.)	Average distance carried in miles. (The distance is reckoned either from the sources of supply or from the places of delivery to several storages.) Coal.	Wood.	DESCRIPTION OF FUEL WITH ACTUAL QUANTITY CONSUMED AND COST PER TON. Foreign coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Indian coal. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Wood. Quantity in tons.	Cost per ton. Including freight.	Excluding freight.	Consumption in lbs. (Calculated on the actual quantity of coal, and wood reduced in terms of coal at the rate of one ton of coal to 2½ tons of wood.) Per train mile.	Per engine mile.	Per 1,000 freight ton miles.	Per 1,000 gross ton miles.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
							Rs.	Rs.		Rs.	Rs.		Rs.	Rs.					
22 (c) (f)	S. M.	1901	England	481	92	...	...	...	35,582	13 38	5·00	49,588	5·70	4·08	38·41	37·01	818·19	217·36	
		1902	Singareni and Bengal.	402	96	...	...	...	38,506	13·67	5·25	62,422	5 64	4·08	39·11	34·71	804·00	215·09	
		1903		351	74	133	18·88	18·88	38,492	14·25	8·40	65,629	5·44	4·19	40·71	36·27	803·88	219·75	
		1904		316	72	...	...	...	40,327	13·99	8·30	69,209	5·32	4·03	37·79	33·28	710·39	201·82	
		1905		...	82	...	...	...	43,125	13·68	8·95	70,137	5·36	4·00	37·04	32·82	718·13	200·65	
22 (f)	W. I. P.	1901	Eng-land.	*	...	18 Included with the South	19·00	...	...	...	...	4,698 Mahratta railway.	4·62	4·50	46·42	45·48	1,160·83	296·80	* Prices are given at the place of delivery which is the place of storage.
		1902																	
23	U. C.	1901	Bengal, Warora & Mohpani.	826	...	...	...	...	862	25·30	4·25	3	9·30	...	37·49	34·79	881·31	180·15	
		1902		875	...	...	...	...	893	18·23	4·62	3	4·36	...	38·50	36·02	942·41	192·23	
		1903		977	...	...	...	...	863	18·71	3·65	4	7·00	7·00	37·37	35·02	1,438·32	207·76	
		1904		1,087	...	...	...	...	701	19·00	2·25	...	...	...	30·32	28·51	1,551·44	185·59	
		1905		1,087	...	...	...	...	762	19·00	2·25	11	...	...	31·91	29·88	1,117·88	167·86	
25	B. L.	1901	Singareni.	...	...	...	...	...	...	...	...	677	4·19	4·19	34·26	33·74	...	...	
		1902		...	...	...	...	...	...	...	...	655	5·00	...	31·90	31·14	...	...	
		1903		441	...	...	...	...	77	14·50	5·50	566	4·97	4·97	40·75	39·32	1,732·86	664·00	
		1904		...	...	...	...	...	...	...	...	790	6·19	6·19	94·59	92·82	...	...	
		1905		...	...	...	...	...	159	...	...	742	6·19	6·19	101·82	99 93	...	...	
27	C.	1905	...	...	...	...	...	...	123	17·25	...	2	24·50	...	64·16	64·16	...	...	
30	K. S.	1901	Bengal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1903		1,021	...	...	...	...	288	20·00	2·25	...	...	...	46·43	35·75	...	...	
		1904		1,018	...	...	...	...	5,166	21·00	2·25	144	12·19	...	69·46	59·97	7,984·98	1,135·26	
		1905		1,016	...	...	...	...	5,189	17·50	2·25	43	...	...	71·18	66·77	6,500·13	942·22	
32	B. P.	1901	Bengal	...	...	...	...	...	963	6·25	3·30	...	...	...	25·23	23·72	...	...	
		1902		126	...	...	...	...	979	5·39	2·75	...	...	...	25·20	23·92	...		
		1903		157	...	...	...	...	960	5·36	2·92	...	...	...	25·27	24·10	...	...	
		1904		157	...	...	...	...	1,083	4·44	2·03	...	...	...	26·92	25·37	...	...	
		1905		157	...	...	...	...	1,128	4·33	1·56	...	...	...	28·53	26·92	...	...	
33	T. B.	1901	Assam	...	...	...	...	...	382	13·49	...	...	...	...	26·23	...	...	...	
		1902		...	...	...	...	...	396	13·50	...	...	...	...	26·76	...	...	...	
		1903		...	...	...	...	...	523	11·31	...	...	...	...	35·40	...	...	...	
		1904		...	...	...	...	...	580	13·50	...	...	...	...	38·52	...	...	...	
		1905		...	...	...	...	...	643	13 50	...	...	...	...	38·85	...	...	...	
35	D. H.	1901	Bengal	404	...	...	...	...	3,052	15·26	3·12	...	...	...	38·38	38·38	...	...	
		1902		...	...	...	...	...	3,422	15·30	3·12	...	...	...	40·81	40·81	...	...	
		1903		...	...	...	...	...	4,666	13·98	3·12	...	...	...	53·23	53·23	...	...	
		1904		...	...	...	...	...	4,697	10·00	2·50	...	...	...	41·22	40·83	...	...	
		1905		...	...	...	...	...	5,025	7·84	2·25	...	...	...	44·68	44·68	...	...	
38	J.	1901	Assam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1902		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		1903		9	...	...	...	...	773	13·76	13·62	...	...	...	33·15	...	...	...	† Excluding the Bukhtiarpore-Behar, Ranaghat-Krishnagar, Thaton-Duyinzaik, Howrah-Amta and Howrah-Sheakhala Light railways.
		1904		11	...	...	...	...	890	13·61	...	...	...	...	34·61	...	...	...	
		1905		12	...	...	...	...	864	13·61	...	...	...	...	35·90	...	...	...	
	To-TAL	1901	.....	...	...	13,248	...	...	1,956,601	...	...	409,150	...	...	...	...	...	...	‡ Excluding the Bukhtiarpore-Behar, Thaton-Duyinzaik, Howrah-Amta and Howrah-Sheakhala Light railways.
		1902		...	...	21,469	...	...	2,091,992	...	...	402,442	...	...	...	...	...	...	
		1903		...	...	†17,696	...	...	2,208,889 †	...	...	†497,185	...	...	...	...	...	...	
		1904		...	...	‡17,432	...	...	‡ 2,447,341	...	...	‡395,297	...	...	...	...	...	...	§ Excluding the Becchur and Barsetbasirhat, railways and the railways named in the remark marked with ‡.
		1905		...	...	§18,235	...	...	2,668,424 §	...	...	253,093 §	...	...	...	...	...	...	

APPENDIX 28.

Coal mined in India during the calendar years 1885 to 1905.

Years.	Quantity mined in each Province.											Quantity of Indian coal consumed by railways in India.	Quantity of Indian coal exported by sea.		Quantity of Foreign coal imported into India.	
	Bengal.	Central Provinces.	Assam.	Central India.	Nizam's territory.	Punjab.	Kashmir.	Baluchistan.	Rajputana (Bikaner).	Madras.	Burma.	Total.		To Indian ports, excluding Burma.	To ports outside India, including Burma.	From United Kingdom.	From other countries.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885.	1,123,700	119,116	43,707	7,698	...	...	...	...	...	...	...	1,294,221	466,716	Information is not available.	500	778,643	40,659
1886.	1,186,802	117,287	70,859	13,539	...	...	...	...	...	...	...	1,388,487	470,075		199	698,482	44,652
1887.	1,319,090	128,981	89,302	15,497	3,259	7,523	...	411	...	...	...	1,564,063	488,774		315	786,149	43,010
1888.	1,380,594	157,768	101,528	41,580	13,362	11,249	...	2,802	...	...	...	1,708,903	551,770		15,796	785,776	20,463
1889.	1,541,356	144,465	116,676	52,956	59,646	22,835	...	8,238	...	...	...	1,946,172	715,240		39,972	717,024	52,180
1890.	1,626,245	137,022	145,708	77,842	125,486	40,677	...	15,541	...	...	...	2,168,521	654,829		26,336	681,725	21,857
1891.	1,747,122	141,736	154,268	69,741	144,668	60,714	...	10,368	...	20	...	2,328,577	797,142		4,515	726,069	17,344
1892.	1,920,050	132,005	164,050	88,623	149,601	66,352	...	13,264	...	61	3,670	2,537,696	885,492		15,725	628,374	23,123
1893.	1,902,866	135,118	164,420	94,348	157,421	77,294	...	20,094	...	502	9,938	2,562,001	924,900		52,302	616,319	18,066
1894.	2,035,934	140,495	169,448	122,337	240,525	66,467	...	24,753	...	1,337	12,111	2,823,907	1,062,748	143,813	154,282	675,043	57,112
1895.	2,716,155	122,776	172,717	118,479	292,915	72,493	...	25,458	...	1,737	17,289	3,540,019	1,119,621	162,276	211,407	773,675	15,458
1896.	3,037,920	141,155	177,259	115,386	262,681	79,017	...	26,257	...	...	22,993	3,863,698	1,182,051	389,842	191,030	524,420	93,212
1897.	3,142,497	131,629	185,533	124,778	365,550	92,792	...	12,043	...	...	11,472	4,066,294	1,328,120	731,742	399,979	210,257	47,016
1898.	3,622,090	149,709	200,329	134,726	394,622	85,862	...	13,372	511	...	6,975	4,608,196	1,418,241	737,689	490,290	297,076	34,209
1899.	4,035,265	156,576	225,623	164,569	401,216	81,835	...	15,322	4,249	...	8,105	5,093,260	1,560,771	672,311	467,306	406,451	112,064
1900.	4,978,492	172,842	216,736	164,489	469,291	74,083	...	23,281	9,250	...	10,228	6,118,692	1,858,061	1,030,709	711,874	91,710	43,939
1901.	5,487,585	191,516	254,100	164,362	421,218	67,730	...	24,656	12,094	...	12,466	6,635,727	1,956,631	1,157,892	645,953	112,519	79,108
1902.	6,259,236	196,981	221,096	171,538	455,424	55,373	1,060	33,889	16,503	...	13,302	7,424,402	2,091,992	974,602	728,316	198,574	20,773
1903.	6,361,212	159,154	239,328	193,277	362,733	43,704	999	46,909	21,764	...	9,306	7,438,386	2,203,889	1,235,318	723,873	133,711	30,429
1904.	7,063,680	139,027	266,765	185,774	419,546	45,594	270	49,867	45,078	...	1,105	8,216,706	2,447,341	1,447,867	893,885	174,705	79,169
1905.	7,242,758	147,265	277,065	157,701	454,294	62,622	*	40,762	42,964	...	...	8,425,431	2,663,424	1,635,263	1,144,680	147,735	50,024

* Information not available.

APPENDIX 29.

State Collieries worked by Railway Companies or by the State.

Particulars.	Kurhurbaree and Serampore.		Warora.		Dandot.		Khost.		Haranpur pressed fuel Factory.		Remarks.
	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	
Name of owner	East Indian railway.		State.		North State	Western railway.	North State	Western railway.	Northern railway.	West-State way.	
Capital outlay . Rs.	21,30,572	22,34,832	14,15,597	13,24,899	1,94,753	2,13,486	3,25,462	3,05,815	85,002	80,701	*East Indian railway.*—Capital outlay is approximate and is made up of the purchase money, Rs. 3,65,154, which represents half the original cost of buildings, plant, etc., paid to the East Indian Railway Company on valuation, and the capital expenditure incurred from 1st January 1880.
Output — Large coal. Tons	469,425	5,12,150	87,052	93,806	19,971	28,624	4,313	4,959	...	...	
Output — Small coal. Tons	33,736	19,226	25,267	29,709	674	25	455	296	...	...	
Output — Slack coal. Tons	82,303	86,628	...	...	10,358	14,513	33,806	28,835	...	...	
Output — Total. Tons.	585,464	6,18,004	1,12,319	1,23,015	31,003	43,162	38,574	34,140	5,659	6,162	*Warora.*—The decrease in the capital outlay in 1905 was due to certain credits, owing to a write-back under stores, manufactures and other heads.
Quantity issued . Tons	597,203	6,27,020	1,12,319	1,22,843	31,003	43,162	38,574	34,140	5,659	6,162	*Khost.*—The decrease in the capital outlay in 1905 was due to heavy issues of stores from reserve stock.
Gross earnings . Rs.	10,61,310	11,20,909	5,50,702	5,67,546	2,01,048	3,25,404	3,42,710	3,01,444	56,590	68,426	*Haranpur.*—The decrease in the capital outlay in 1905 was due to the small charge for capital outlay being exceeded by annual depreciation.
Working expenses . Rs.	10,61,310	11,20,909	3,73,696	3,80,477	2,27,549	3,21,843	3,06,382	2,93,050	63,775	67,075	
Net earnings or loss . Rs.	...	...	1,77,006	1,87,069	−26,501	3,561	36,328	8,394	−7,185	1,351	
Percentage on capital .	...	...	12·50	14·12	...	1·66	11·16	2·75	...	1·67	
Average number of persons employed daily.	8,281	8,370	1,040	987	1,229	1,360	705	719	14	7	
Number of tons raised per person employed.	70	74	108	125	25	32	55	48	1	2	
Number of persons killed.	2	1	2	...	...	1	3	5	...	...	
Number of persons injured.	27	10	3	4	7	4	...	1	...	...	

APPENDIX 30.

Accidents and casualties to trains on railways treated as one System during the Calendar years 1904 and 1905.

Description.	Accidents reported to Local Governments under section 83 of the Indian Railways Act, IX of 1890, *i.e.*, serious accidents.		Other accidents.		Total number of accidents.		Number of passengers and others. (Figures in italics were not passengers.) Killed.				Number of servants. Killed.				Total of all classes. Killed.			
									Injured.				Injured.					
	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.	1904.	1905.
1. Collisions between passenger trains or parts of passenger trains	4	5	2	4	6	9	...	...	3	30	...	...	1	5	...	...	4	35
2. Collisions between passenger trains and goods or mineral trains, engines, and vehicles standing foul of the line	24	20	59	31	83	51	7	*1*	40	63	3	1	11	24	10	2	51	87
3. Collisions between goods trains or parts of goods trains	11	11	45	57	56	68	...	*1*	...	4	1	1	9	36	1	2	9	40
4. Collisions between light engines	4	3	38	32	42	35	...	...	...	...	...	2	4	5	...	2	4	5
5. Passenger trains or parts of passenger trains leaving the rails	82	74	47	84	129	158	...	...	1	5	...	...	...	10	...	...	1	15
6. Goods trains or parts of goods trains, engines, etc., leaving the rails	9	7	377	365	386	372	1	...	...	...	7	...	8	5	8	...	8	5
7. Trains or engines travelling in the wrong direction through points	11	9	118	88	129	97	...	...	11	17	2	...	10	6	2	...	21	23
8. Trains running into stations or sidings at too high a speed	4	5	24	27	28	32	...	...	...	7	2	...	1	3	2	...	1	10
9. Trains running over cattle on the line	17	14	3,248	3,274	3,265	3,288	...	...	*1*	*6*	2	1	15	2	2	1	16	8
10. Trains running over obstructions on the line	18	15	139	165	157	180	1 *1*	1 *3*	1 *7*	5	1	2	1	1	3	6	9	6
11. Trains running through gates at level crossings	3	1	38	27	41	28	...	...	...	...	...	...	...	...	...	...	...	...
12. The bursting of boilers of engines	...	...	2	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...
12. (a) The bursting of tubes, etc., of engines	...	1	307	298	307	299	...	...	...	...	...	...	...	...	...	...	...	...
13. The failure of machinery, springs, etc., of engines	4	3	936	813	940	816	...	...	...	...	...	1	2	1	...	1	2	1
14. The failure of tyres	...	...	13	13	13	13	...	...	...	...	...	...	...	...	...	...	...	...
15. Ditto of wheels	1	...	14	7	15	7	...	...	...	...	...	...	...	...	...	...	...	...
16. Ditto of axles	16	10	51	59	67	69	1	...	3	...	...	...	...	...	1	...	3	...
17. Ditto of brake apparatus	1	...	7	4	8	4	...	...	...	...	...	...	...	...	...	...	...	...
18. Ditto of couplings	5	2	370	330	375	332	...	...	2	...	...	...	1	5	...	...	3	5
19. Ditto of tunnels, bridges, viaducts, culverts, etc.	2	...	...	4	2	4	...	...	...	...	...	...	...	...	...	...	...	...
20. Broken rails	...	1	124	158	124	159	...	...	...	...	...	...	...	1	...	...	...	1
21. The flooding of portions of permanent-way	20	39	75	106	95	145	...	...	...	...	...	...	...	...	...	...	...	...
22. Slips in cuttings or embankments	21	7	39	55	60	62	1	...	14	...	2	2	...	1	3	2	14	1
23. Fire in trains	3	2	169	209	172	211	...	1	1	1	...	...	...	...	...	1	1	1
24. Fire at stations, or involving injury to bridges or viaducts	6	2	48	57	54	59	2	*1*	*1*	...	...	...	2	1	2	1	3	1
25. Other accidents	34	18	515	605	549	623	3	...	7 *6*	17	3	5	38	9	6	5	51	26
Total	300	249	6,805	6,874	7,105	7,123	11 *6*	3 *5*	83 *15*	140 *15*	23	15	103	115	40	23	201	270

Numerical return of servants of all races employed on each railway system (open lines only) and

Number.		Railway system.	Number of servants employed.							
			Europeans.		Eurasians.		Natives.		Total.	
Main head.	Sub-head.		1904, Revised.	1905.	1904, Revised.	1905.	1904, Revised.	1905.	1904, Revised.	1905.
1	...	Bengal-Nagpur	391	447	612	754	21,842	23,757	22,845	24,958
2	(*a*) to (*f*) & (*n*) & (*o*).	Bombay, Baroda and Central India	233	237	268	271	15,312	15,783	15,713	16,291
3	...	Eastern Bengal State	304	333	430	405	22,691	26,757	23,425	27,495
4	...	East Indian	1,447	1,506	902	1,026	70,057	76,497	72,406	79,029
5	...	Great Indian Peninsula	1,047	1,103	963	998	60,193	65,617	62,223	67,718
6	...	Madras	278	268	1,586	1,616	23,353	24,386	25,217	26,270
8	...	Nizam's Guaranteed State	84	72	355	382	7,403	7,634	7,842	8,088
9	...	North Western State	870	888	662	718	57,418	61,660	58,950	63,266
10	...	Oudh and Rohilkhand State	283	317	293	359	20,419	21,273	20,995	21,949
11	...	Assam-Bengal	81	85	104	95	5,556	5,774	5,741	5,954
12	...	Bengal and North-Western	165	166	199	195	18,405	20,022	18,769	20,383
13	...	Bengal Dooars	5	4	6	4	874	1,170	885	1,178
14	...	Bhavnagar-Gondal-Junagad-Porbandar	11	9	26	30	2,663	2,681	2,700	2,720
15	...	Burma	207	209	634	616	13,388	13,673	14,229	14,498
16	...	Deoghur	...	...	1	1	60	66	61	67
17	...	Dibru-Sadiya	9	9	...	...	967	983	976	992
18	...	Jodhpur-Bikaner	14	11	4	6	3,310	3,515	3,328	3,532
19	...	Moryi	1	1	2	2	490	388	493	391
2	(*g*) to (*m*)	Rajputana-Malwa	439	444	519	489	24,599	28,072	25,557	29,005
20	...	Rohilkund and Kumaon	23	27	17	19	3,150	3,450	3,190	3,496
21	...	South Indian	157	157	683	748	14,832	15,028	15,677	15,933
22	...	Southern Mahratta	186	188	433	422	14,186	15,003	14,810	15,613
23	...	Udaipur-Chitor	2	2	...	...	356	368	358	370
24	...	Baraset-Basirhat Light	...	...	...	1	...	169	...	170
25	...	Barsi Light	1	2	2	4	184	178	187	184
26	...	Bukhtiarpore-Behar Light	1	1	...	...	102	111	103	112
27	...	Cutch	...	1	...	...	...	55	...	56
30	...	Kalka-Simla	16	16	...	...	347	312	363	328
32	...	Tarakeshwar-Magra Light	...	...	1	1	223	225	224	226
33	...	Tezpore-Balipara Light	2	2	2	2	180	188	184	192
35	...	Darjeeling-Himalayan	18	24	14	10	987	865	1,019	899
36	...	Howrah-Amta Light	4	5	1	1	359	370	364	376
37	...	Howrah-Sheakhala Light	...	...	...	...	90	104	90	104
38	...	Jorhat	1	1	...	...	247	214	248	215
		Total	6,230	6,535	8,749	9,175	404,143	436,348	419,172	452,058

DIX 31.

the amounts deposited by them in the Provident Fund at the close of the Calendar year 1905.

AMOUNT DEPOSITED IN PROVIDENT FUND.						REMARKS.
Number of depositors.		Amount at credit on the 31st December 1905.				
Voluntary.	Compulsory.	Voluntary.	Compulsory.	Bonus given by the Railway.	Total to depositors' credit.	
		Rs.	Rs.	Rs.	Rs.	
400	3,804	1,43,031	10,17,336	7,44,426	19,04,795	
...	2,924	...	20,03,108	16,18,534	36,21,642	Excludes the Provident Fund transactions of the Godhra-Ratlam-Nagda railway which are included with those of the Rajputana-Malwa railway.
150	5,162	26,112	12,77,167	11,55,265	24,58,544	
6,823	10,108	...	...	...	1,33,35,230	Amounts under voluntary and compulsory deposits and bonus given by the railway are not available.
3	7,793	947	95,40,124	...	95,41,071	The bonus given by the railway is included in the amount at the credit of voluntary and compulsory depositors.
* 101	6,099	1,24,300	17,31,719	13,96,788	32,52,807	
...	1,407	...	5,51,048	4,87,894	10,38,942	
433	7,996	21,838	32,50,164	29,05,735	62,47,737	
131	3,219	28,995	8,97,811	7,58,954	16,85,760	
...	1,112	...	2,40,315	1,36,551	3,76,866	
9	2,209	61,940	8,02,610	7,50,722	16,15,272	
...	148	...	26,915	20,104	46,119	
153	480	37,259	1,85,705	1,37,814	3,60,778	
...	2,934	...	8,60,422	6,80,061	15,40,483	
...	...	...	...	...	...	
...	...	...	...	...	...	
34	358	7,953	82,382	73,673	1,64,008	
...	...	...	...	...	...	
*	*	*	*	*	*	* Information not available owing to destruction of records by fire.
1	450	119	1,53,647	1,29,491	2,83,257	
14	3,208	4,873	11,40,815	6,30,851	17,76,339	
...	3,549	...	12,43,042	6,18,840	18,61,888	
...	32	...	6,495	2,920	9,415	
...	14	...	262	208	470	
...	...	...	...	...	...	
...	15	...	997	757	1,754	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	...	...	...	...	...	
...	128	...	1,27,681	69,114	1,96,795	
...	85	...	10,159	4,692	14,851	
...	18	...	2,019	1,107	3,126	
10	26	1,078	6,533	3,512	11,123	
*						
8,262	63,278	5,28,445	2,51,57,384	1,23,28,018	5,13,49,072	

APPENDIX 32.

Number of men enrolled in Railway Volunteer Corps on the 31st December 1905.

Number.		Corps.	Enrolled strength.					Total number of European and Eurasian servants on open lines of railway.	Sergeant Instructors furnished by the Army.	Remarks.
			Efficients.			Non-efficients.	Total number of volunteers of all nationalities in corps, including servants on construction work.			
Main head.	Sub-head.		Officers.	Non-Commissioned officers.	Volunteers.					
1	...	Bengal-Nagpur	29	155	1,003	14	1,201	1,201	10	
2	(a) to (f) & (n) & (o)	Bombay, Baroda and Central India— *First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles*	16	63	513	8	600	508	5	
3	...	Eastern Bengal State	21	93	543	8	670	738	4	
4	...	East Indian	65	164	1,894	18	2,141	2,532	18	
5	...	Great Indian Peninsula— *First Battalion, Great Indian Peninsula Railway Volunteer Rifles* ...	49	182	1,234	21	1,486	2,101	13	
6	...	Madras	45	191	1,227	30	1,493	1,884	13	
8	...	Nizam's Guaranteed State— *Hyderabad Volunteer Rifles* ...	8	30	187	14	239	454	3	
9	...	North Western State	44	133	1,061	33	1,271	1,606	12	
10	...	Oudh and Rohilkhand State— *Oudh and Rohilkhand Railway Volunteer Rifles*	13	46	404	4	467	676	4	
		Oudh and Rohilkhand Railway Reservists	2	4	49	...	55		...	
		Oudh Light Horse	...	1	...	...	1		...	
11	...	Assam-Bengal...	17	31	225	...	273	186	3	
12	...	Bengal and North-Western— *Bengal and North-Western Railway Volunteer Rifles*	21	50	259	5	335	361	5	
		United Provinces Light Horse, Gorakhpur Squadron	2	5	30	...	37		1	
14	...	Bhavnagar-Gondal-Junagad-Porbandar— *First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company*	1	6	28	...	35	39	1	
15	...	Burma	33	87	532	1	653	825	9	
19	...	Morvi— *First Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles, F. Company* ...	...	...	2	...	2	3	...	
3	(g) to (m)	Rajputana-Malwa— *Second Battalion, Bombay, Baroda and Central India Railway Volunteer Rifles*	30	78	660	2	770	933	11	
20	...	Rohilkund and Kumaon— *Bengal and North-Western Railway Volunteer Rifle Corps* ...	...	2	31	...	33	46	...	
21	...	South Indian	21	78	481	...	580	905	8	
23	...	Southern Mahratta	19	137	467	4	627	610	6	
23	...	Udaipur-Chitor— *Bombay, Baroda and Central India Railway Volunteer Rifles* ...	1	1	...	...	3	2	...	
32	...	Tarakeshwar-Magra— *East Indian Railway Volunteer Rifles*	...	...	1	...	1	1	...	
35	...	Darjeeling-Himalayan— *Northern Bengal Mounted Rifles, "A" and "B" Troops* ...	1	3	12	...	16	34	1	
		Total ...	438	1,545	10,844	162	12,939	15,639	125	

APPENDIX 33.

Strength and cost of the Police force on each Railway system (open lines), and the amount of compensation payments on account of claims for goods lost or damaged for the Calendar year 1905.

Number.		Railway system.	Subordinate officers.	Constables and men.	Portion of the total annual cost borne by the Railway.				Cost of force to the railway per mile open.	Compensation payments on account of claims for goods lost or damaged.	Remarks.
Main head.	Sub-head.				Supervision.	Constables and men.	Contingencies.	Total cost of force to the railway.			
			Average No.	Average No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1	...	Bengal-Nagpur	13	787	17,744	50,586	4,107	72,437	36·68	97,571	
2	(*a*), (*c*) to (*f*) & (*n*) & (*o*).	Bombay, Baroda and Central India.	23	668	27,671	63,037	5,339	96,047	111·69	19,250	
3	...	Eastern Bengal State	95	851	1,192	52,696	116	54,004	46·15	81,755	
4	...	East Indian	68	1,978	59,069	1,35,407	39,414	2,33,890	104·62	61,788	
5	...	Great Indian Peninsula	64	1,621	61,075	1,35,525	20,203	2,16,803	72·53	1,01,327	
6	...	Madras	22	730	15,279	88,300	10,529	1,14,108	75·31	4,462	
8	...	Nizam's Guaranteed State	3	389	17,449	44,283	2,487	64,219	86·46	889	
9	...	North Western State	...	1,520	...	1,43,820	783	1,44,603	35·27	48,155	
10	...	Oudh and Rohilkhand State	15	649	8,072	45,553	2,489	56,114	44·56	17,563	
11	...	Assam-Bengal	3	223	2,253	16,852	1,106	20,211	26·07	3,232	
12	...	Bengal and North-Western	20	609	3,228	52,718	1,686	57,632	39·29	4,280	
13	...	Bengal Docars	...	9	...	944	...	944	6·17	1,319	
14	...	Bhavnagar-Gondal-Junagad-Porbandar.	26	123	16,787	11,481	6,477	34,745	76·29	843	
15	...	Burma	92	469	20,674	73,533	17,241	1,11,448	33·16	7,501	
18	...	Jodhpur-Bikaner	3	45	1,780	3,966	266	6,012	7·22	689	
2	(*b*) & (*g*) to (*m*).	Rajputana-Malwa	122	615	38,639	85,025	6,959	1,30,623	59·64	27,104	
19	...	Morvi	3	12	772	1,232	596	2,600	29·00	96	
20	...	Rohilkund and Kumaon	11	148	1,055	12,230	1,649	14,934	51·40	1,236	
21	...	South Indian	...	243	45,918	14,967	...	60,885	44·98	4,672	
22	...	Southern Mahratta	14	727	17,298	72,226	6,796	96,320	53·58	7,036	
25	...	Barsi Light	1	4	106	587	47	740	26·49	44	
27	...	Cutch	...	4	...	26	...	26	2·23	...	
30	...	Kalka-Simla	1	44	1,213	1,908	149	3,270	55·01	498	

APPENDIX 34.

Transactions of the Fine Funds for the Calendar year 1905.

Number.		Railway system.	Assets.				Disbursements.						Balance on 31st December 1905.
Main head.	Sub-head.		Balance on 31st December 1904. (*Revised*)	Fines and bonus forfeited during 1905.	Interest on balance.	Total.	Hospitals for sick employés.	Compassionate allowances.	Schools.	Recreation clubs.	Miscellaneous.	Total.	
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	...	Bengal-Nagpur .	23,974	17,922	776	42,672	...	...	950	4,035	8,969	13,954	28,718
2	(*a*),(*c*) to (*f*) & (*n*) & (*o*).	Bombay, Baroda and Central India . .	10,865	3,550	420	14,835	120	1,640	7,500	1,956	352	11,568	3,267
3	...	Eastern Bengal State	7,061	20,784	304	28,149	...	745	3,013	5,515	6,478	15,751	12,398
4	...	East Indian . .	1,11,876	24,844	3,676	1,40,396	...	...	2,684	1,811	29,056	33,551	1,06,845
5	...	Great Indian Peninsula	5,431	17,855	297	23,583	...	1,606	873	1,250	2,343	6,072	17,511
6	...	Madras . . .	1,07,674	9,859	4,157	1,21,690	...	6,078	140	141	8,353	14,712	1,06,978
8	...	Nizam's Guaranteed State . . .	7,029	2,719	217	9,965	...	...	70	...	485	555	9,410
9	...	North Western State	15,849	18,791	547	35,187	100	443	5,454	10,250	1,489	17,741	17,446
10	...	Oudh and Rohilkhand State . . .	12,090	5,183	447	17,720	...	19	5,204	360	3,828	9,411	8,309
11	...	Assam-Bengal . .	11,763	9,230	...	20,993	...	1,372	175	3,335	6,449	11,331	9,662
12	...	Bengal and North-Western . . .	79,704	17,402	1,032	98,138	...	...	831	3,149	3,779	7,759	90,379
13	...	Bengal Docars . .	900	1,014	42	1,956	...	...	...	338	...	338	1,618
14	...	Bhavnagar-Gondal-Junagad-Porbandar	5,864	1,112	178	7,154	...	48	260	198	528	1,034	6,120
15	...	Burma . . .	11,151	15,543	...	26,694	...	...	2,683	3,528	12,769	18,980	7,714
18	...	Jodhpur-Bikaner .	5,625	2,007	...	7,632	...	...	114	702	6	822	6,810
2	(*b*) & (*g*) to (*m*).	Rajputana-Malwa .	Information not available owing to destruction of records by fire.										
19	...	Morvi . . .	1,485	112	...	1,597	...	48	...	...	...	48	1,549
20	...	Rohilkund and Kumaon	24,309	5,264	882	30,455	...	300	...	607	...	907	29,548
21	...	South Indian . .	1,55,751	7,128	4,390	1,67,269	...	1,820	386	14,749	1,303	18,258	1,49,011
22	...	Southern Mahratta .	962	3,907	23	4,892	100	...	356	1,925	275	3,126	1,766
23	...	Udaipur-Chitor . .	302	47	...	349	...	...	...	...	...	...	349
24	...	Barasat-Basirhat Light . . .	...	72	...	72	...	...	...	...	72	72	...
26	...	Bukhtiarpore-Behar Light . . .	...	9	...	9	...	...	...	...	9	9	...
30	...	Kalka-Simla . .	255	305	...	560	...	...	...	...	13	13	547
32	...	Tarakeshwar-Magra Light . . .	...	19	...	19	19	...	...	...	...	19	...
33	...	Texpore-Balipara Light	...	36	...	36	...	...	20	...	...	20	16
35	...	Darjeeling-Himalayan	145	153	...	298	...	...	...	100	2	102	196
36	...	Howrah-Amta Light .	...	166	...	166	...	...	...	...	166	166	...
37	...	Howrah-Sheakhala Light . . .	...	26	...	26	...	...	...	...	26	26	...
38	...	Jorhat . . .	392	90	12	494	...	...	...	...	120	120	374

APPENDIX 35.

Railway and Railway Aided Schools at the close of the Calendar year 1905.

Numbers. Main head.	Numbers. Sub-head.	Railway system (vide Appendix I).	RAILWAY SCHOOLS. Number of schools.	Attendance. Children. Number on the rolls.	Attendance. Children. Average daily attendance.	Attendance. Apprentices and workmen. Number on the rolls.	Attendance. Apprentices and workmen. Average daily attendance.	Contributions. By Government.	Contributions. By Railway. From Revenue.	Contributions. By Railway. From Fine Fund.	Contributions. By school fees.	Contributions. Total.	Expenditure.	RAILWAY AIDED SCHOOLS. Number of schools.	Average daily attendance. Children.	Average daily attendance. Apprentices and workmen.	Railway grant. From Revenue.	Railway grant. From Fine Fund.	Remarks.
								Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.	
1	...	B. N. European	5	210	172	...	...	3,055	3,300	650	4,125	11,130	10,486	4	295	...	600	...	
		B. N. Native	3	231	191	...	...	196	900	300	668	2,064	2,350	...	...	...	...	...	
2	(a) to (f) & (n) & (o)	B. & C. I. European	3	119	81	4	4	1,491	4,020	...	2,649	8,160	7,777	18	59	...	3,258	7,500	
		B. & C. I. Native	2	18	12	21	18	153	600	...	237	990	924	...	...	...	...	...	
3	...	E. B.S. European	...	...	...	...	...	...	...	...	...	...	...	5	127	8	2,161	2,161	
		E. B.S. Native	5	98	64	252	67	...	1,129	...	...	1,129	1,129	13	585	...	752	852	
4	...	E.I. European	18	850	769	62	52	13,816	27,277	...	79,849	1,20,942	1,15,424	2	57	...	1,987	...	
		E.I. Native	67	2,620	1,726	2,966	1,065	3,264	2,636	2,507	15,341	23,748	24,676	1	296	...	...	177	
5	(a)	G. I. P. European	5	223	189	...	...	2,769	12,282	642	2,490	18,183	18,183	8	109	...	3,619	15	
		G. I. P. Native	...	...	...	...	...	...	...	...	...	...	...	11	535	...	2,040	...	
5	(b) to (f)	I. M. European	2	114	75	...	...	...	7,123	216	984	8,323	8,323	...	...	...	...	...	
		I. M. Native	...	...	...	...	...	...	...	...	...	...	...	2	79	...	270	...	
6	...	M. European	9	436	363	...	...	4,592	16,732	115	4,321	25,760	26,781	9	161	...	3,958	25	
8	(a) & (b)	N. G. S. European	1	59	50	...	...	...	1,604	...	485	2,089	1,227	3	131	...	510	...	
		N. G. S. Native	1	64	47	6	3	...	996	...	158	1,154	993	6	377	...	540	70	
9	...	N. W. European	2	72	54	32	24	2,066	1,927	353	721	5,067	5,234	19	489	...	14,647	2,078	In addition to these grants from the Fine Fund, the North Western State railway also contributed Rs. 1,783 for the "Oakgrove School" at Mussoorie and Rs. 45 to the Cathedral Orphanage, Lahore.
		N. W. Native	24	104	86	2,309	577	...	5,834	98	313	6,245	4,916	3	258	2	2,729	498	
10	...	O. & B. European	4	50	43	38	35	876	940	1,796	1,260	4,872	3,612	15	56	...	4,603	2,306	
		O. & B. Native	3	...	...	76	19	...	322	124	...	446	446	3	134	...	...	978	
11	...	A. B. European	1	24	29	...	...	249	1,200	175	131	1,755	1,615	...	...	...	...	...	
12	...	B. & N. W. European	2	62	58	...	...	1,255	1,800	831	894	4,780	3,963	...	...	...	...	...	
		B. & N. W. Native	...	...	...	...	...	...	...	...	...	...	...	2	64	...	324	...	
13	...	B. D. Native	...	...	...	...	...	...	...	...	...	...	...	1	17	...	120	...	
14	...	B. G. J. P. European	1	11	9	...	...	...	996	260	197	1,453	1,241	...	...	...	...	...	
		B. G. J. P. Native	2	91	72	...	...	...	584	...	242	826	657	...	...	...	...	...	
15	...	B. European	3	66	54	23	20	2,177	81	681	1,378	4,317	3,928	17	35	...	272	272	
		B. Native	3	218	177	18	*20	2,534	605	1,420	3,220	7,779	6,510	17	43	...	310	310	* The average daily attendance is more than the number on the rolls owing to the numbers on the rolls having been more during the year than that on the 31st December 1905.
17	...	D. S. Native	1	72	65	...	...	...	300	...	699	999	1,754	...	...	...	...	...	
18	...	J. B. Native	1	12	9	...	...	...	...	114	...	114	114	...	...	...	...	...	
8	(c)	H. G. V. European	1	23	11	...	...	...	420	...	110	530	357	...	...	...	...	...	
		H. G. V. Native	...	...	...	...	...	...	...	...	...	...	...	1	36	...	120	...	
2	(g) to (m)	E. M. European	3	181	154	97	85	2,260	5,889	1,851	3,726	13,726	13,560	1	69	...	180	...	
		E. M. Native	6	316	263	72	65	960	901	1,232	2,360	5,453	5,368	1	83	...	...	554	
21	...	S. I. European	4	154	89	...	...	991	4,196	386	721	6,294	4,490	...	...	...	...	...	
		S. I. Native	1	58	54	...	...	111	426	...	213	750	461	...	...	...	...	...	
22	...	S. M. European	8	207	168	...	...	911	6,011	30	1,779	8,731	8,301	7	376	...	...	550	
		S. M. Native	6	144	110	98	34	138	1,056	180	1,422	2,796	2,479	1	111	...	...	96	
33	...	T. B. Native	1	...	...	32	16	...	109	20	...	129	129	...	...	...	...	...	
5	(g)	G. L. Native	...	...	...	...	...	...	...	...	...	...	...	1	...	17	240	...	
		Total ...	203	6,907	5,244	6,106	2,104	43,564	1,12,106	12,981	1,30,693	3,00,784	2,87,458	171	4,582	27	42,640	19,042	

APPENDIX 38.

History of open lines of railways, and of lines under construction or sanctioned for commencement, on the 31st December 1905.

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20	(c)	Powayan Light	180
1	(g)	Purulia-Ranchi	110
		R	
1	(e)	Raipur-Dhamtari	108
2	(o)	Rajpipla	123
9	(d)	Rajpura-Bhatinda	154
2	(l)	Rajputana-Malwa	119
20	(a)	Rohilkund and Kumaon	177
		S	
6	(h)	Salem-Attur	147
22	(l)	Sangli	194
31	(a)	Shahdara (Delhi) Saharanpur Light	198
6	(e)	Shoranur-Cochin	145
4	(c)	South Behar	132
21	(a)	South Indian	181
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21	(d)	Tanjore District Board	184
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4	(d)	Tarkessur	132
33	(a)	Tezpore-Balipara Light	199
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21	(a)	Tinnevelly-Quilon (Travancore) (British section)	185
21	(b)	Tinnevelly-Quilon (Travancore) (Native State section)	185
12	(b)	Tirhoot	164
6	(f)	Tirupattur-Krishnagiri	147
		U	
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2	(m)	Vijapur-Kalol-Kadi	121
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22,	(j)	West of India Portuguese	192

APPENDIX 38.

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 1}}{\text{Sub-heads } (a) \text{ to } (g)}$. **BENGAL-NAGPUR RAILWAY SYSTEM—**

Lines comprising the system.—The Bengal-Nagpur railway system is made up of—

		Open line.	Under construction or sanctioned for construction.	Total.
		Miles.	Miles.	Miles.
(*a*) Bengal-Nagpur railway	(5′ 6″ gauge)	1,377·83	29·89	1,407·72
(*a*) East Coast (State) railway, Northern section	(5′ 6″ gauge)	311·93	...	311·93
(*b*) Jubbulpore-Gondia Extension, Bengal-Nagpur railway	(2′ 6″ gauge)	228·77	61·26	290·03
(*c*) Mourbhanj railway	(2′ 6″ gauge)	32·41	...	32·41
(*d*) Parlakimedi Light railway	(2′ 6″ gauge)	24·62	...	24·62
(*e*) Raipur-Dhamtari branch, Bengal-Nagpur railway	(2′ 6″ gauge)	56·24	...	56·24
(*f*) *Gondia-Chanda*	(2′ 6″ gauge)	...	212·40	212·40
(*g*) *Purulia-Ranchi*	(2′ 6″ gauge)	...	72·28	72·28
	Total	2,031·80	375·83	2,407·63

Running powers—

	Miles.
Home line over Foreign lines :—	
At Katni, East Indian railway } for passenger and goods trains	0·30
At Asansol „ „ „ }	0·50
At Howrah „ „ „ for passenger trains only	1·00
At Nagpur, Great Indian Peninsula railway } for passenger and goods trains.	0·65
Waltair to Vizagapatam, including wharf and swamp lines, Southern section, East Coast (State) railway }	4·97
Total	7·42
Foreign line over Home line :—	
Great Indian Peninsula railway at Katni (for passenger trains only)	1·00

1 (*a*) Bengal-Nagpur railway (5′ 6″ gauge)—

Details of construction—

The open mileage of the Bengal-Nagpur railway, 5′ 6″ gauge, amounts to 1,689·76 miles, which may be divided into (*1*) *Bengal-Nagpur railway proper*, main line (Asansol to Nagpur), 626·83 miles, branches, 751 miles; and (*2*) *Northern section of the old East Coast (State) railway*, main line (Barang to Waltair), 284·75 miles, branch, 27·18 miles. Of this 68·78 miles are double line. There are under construction 29·89 miles of single line, and 4·16 miles of main line are in course of being doubled.

The construction of the first portion of the main line, Asansol to Nagpur, was sanctioned in 1884 and opened through in 1891. The Sini-Howrah section was opened in 1900.

Permanent-way.—The line is laid with 75-lb. and 85-lb. steel rails on transverse wooden, steel and cast iron pot sleepers.

Ballast.—The line is ballasted throughout with stone, except for a few miles on the Chakardharpore district where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations, also at some of the station yards and first class level crossings on the Barang-Waltair section.

Curves.—On the main line there are no curves sharper than 1,000 feet radius.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction.

Terms of contracts—

The Bengal-Nagpur railway is worked under the following contracts :—

Contracts of—9th March 1887.—Bengal-Nagpur Railway Company's principal contract.

31st December 1891.—Contract for the construction and working of a branch line from Jharsuguda (Sambalpur Road) station on the main line to Sambalpur.

27th June 1901.—As to the raising of debenture capital for the construction of the Sini-Midnapore-Howrah and Midnapore-Cuttack extensions.

23rd January 1902.—Contract for the construction and working of the Raipur-Dhamtari (2′ 6″ gauge) feeder line with a branch to Rajim; an extension (5′ 6″ gauge) from Sini, *viâ* Midnapore, to Howrah, with branches from Midnapore to Cuttack and the Jharia coal-fields; a line (2′ 6″ gauge) from Gondia to Jubbulpore with branches from Nainpur to Mandla, Nainpur to Chhindwara; and for the working of the Northern section of the East Coast (State) railway as part of the undertaking.

The general conditions of the contracts are as follows :—

Government aid.—Free grant of land and guarantee of interest in sterling at 4 per cent. per annum on £3,000,000 share capital. On any further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon.

Terms of contracts.—The contracts provide for the Company raising £3,000,000; any further money required being provided either by the Secretary of State upon such terms as may from time to time be mutually agreed upon, or by the Company within such periods and in such instalments as the Secretary of State may prescribe. Subject to the provisions of the contracts, all moneys raised by the Company become the absolute property of the Secretary of State.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 1}}{\text{Sub-heads (a) to (g)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM—*contd.***

1 (*a*) Bengal-Nagpur railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Currency of contracts:—

(1) *Principal contract.*—Government may determine the contract by giving twelve months' previous notice on the 31st December 1913 or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line be worked at a loss. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay at par the amount of the share capital which has been paid in by the Company.

(2) *Sambalpur branch contract.*—The contract for this branch brings it within the provisions of the original contract of 9th March 1887; but provides that the Government may purchase the branch at any time after 1st January 1895 on giving twelve months' notice.

(3) *Contract of 23rd January 1902: Northern section, East Coast (State) railway.*—Government may, at any time, by giving six months' previous notice, require the Company to retransfer the whole or any part of the section of railway between Vizianagram and Waltair Junction with all appurtenances, without compensation in respect of such retransfer.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses—which may include any single item of capital expenditure, classed as a "Minor Work," up to Rs. 1,000 but not exceeding Rs. 2,000 at the discretion of the Consulting Engineer, subject to a maximum charge on such account of Rs. 20 per mile of the open system in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision—three parts of the surplus profits for any complete calendar year, after providing for payment to Government of interest on advances of capital made by them to the Company and for repayment of the interest paid by them to the Company for that year, to be retained by Government, and the remaining fourth part to be divided between the Company and Government in the proportion which the gross earnings of the Company's undertaking, exclusive of the Northern section of the East Coast (State) railway, bear to the gross earnings of the latter section.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates. The Madras Railway Company has the power to quote through rates in the direction of Madras from Bengal-Nagpur stations between Cuttack and Waltair. The Bengal-Nagpur Railway Company similarly has power to quote rates from Madras railway stations, Tadepalli and Cuttack, in the direction of Calcutta.

Statistics of working—See page 109.

1 (*b*) Jubbulpore-Gondia extension, Bengal-Nagpur railway (2′ 6″ gauge)—

Details of construction—

The open mileage of the Jubbulpore-Gondia extension amounts to 228·77 miles, which may be divided into main line (Jubbulpore to Gondia), 140·94 miles, and branches, 87·83 miles. There are still 29·12 miles (Pench Valley railway) under construction, and 32·14 miles (Mandla branch), sanctioned for construction. The construction of the line was sanctioned in 1901 and it was opened in July 1904.

Permanent-way.—The permanent-way consists of 41-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted with stone, except between Seoni and Chhindwara where good black basalt has been used.

Fencing.—Only important station yards are fenced.

Curves.—The sharpest curve is of 409 feet radius.

Gradients.—The ruling gradient is 1 in 80.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working—See page 109.

1 (*c*) Raipur-Dhamtari branch, Bengal-Nagpur railway (2′ 6″ gauge)—

Details of construction—

This branch is 56·24 miles in length and consists of the main line (Raipur to Dhamtari), 45·74 miles, and the branch (Abhanpur to Rajim), 10·50 miles. It was sanctioned in 1897 and opened in 1900.

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on sâl sleepers.

Ballast.—Moorum or sand and stone in a few cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 409 feet radius, at Raipur station.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts relating to that railway.

Statistics of working.—See page 109.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 1}}{\text{Sub-heads (a) to (g)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM**—*contd.*

Statistics of working—

TABLE I. (BENGAL-NAGPUR RAILWAY, INCLUDING THE NORTHERN SECTION OF THE EAST COAST (STATE) RAILWAY, THE RAIPUR-DHAMTARI BRANCH AND THE JUBBULPORE-GONDIA EXTENSION)

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	28,62,990	...	...	...	33,911	...	—33,911
1880	55,49,511	1,03,952	28,215	0·51	1,58,804	...	—1,30,589
1881	73,65,710	2,81,529	66,056	0·90	2,62,932	...	—1,96,876
1882	90,64,388	6,04,386	1,89,171	2·09	3,39,967	...	—1,50,796
1883	96,48,590	13,20,021	6,83,860	7·09	3,73,283	...	+3,10,577
1884	1,06,34,112	13,23,014	6,58,030	6·19	4,24,400	...	+2,33,630
1885	1,50,66,406	14,14,889	4,93,575	3·28	5,86,281	...	—92,706
1886	1,51,70,455	14,24,521	5,33,514	2·94	7,29,554	...	—1,96,041
1887	2,42,30,987	14,47,705	3,03,207	1·25	13,35,563	...	—10,32,356
1888	5,23,92,291	16,09,195	5,62,971	1·07	22,17,333	...	—16,54,362
1889	7,08,75,456	19,96,930	4,03,160	0·57	29,96,364	...	—25,93,204
1890	8,14,66,762	23,64,578	5,47,463	0·67	33,88,839	...	—28,41,389
1891	9,08,04,164	54,57,356	26,84,453	2·96	35,05,676	...	—8,21,223
1892	9,56,14,736	60,83,562	30,08,166	3·15	39,05,345	...	—8,97,179
1893	9,80,08,424	64,17,751	32,62,220	3·33	43,97,594	...	—11,35,374
1894	9,81,73,789	66,90,648	32,58,414	3·32	45,83,993	...	—13,25,579
1895	9,88,94,777	68,74,740	35,41,444	3·58	48,56,800	...	—13,15,356
1896	11,05,30,319	63,68,525	29,27,609	2·65	48,27,504	...	—18,99,895
1897	13,04,58,784	62,00,309	29,79,559	2·28	51,35,240	...	—21,55,681
1898	14,67,03,520	68,79,193	33,63,854	2·29	54,23,186	...	—20,59,332
1899	16,65,90,365	90,73,460	47,21,814	2·83	59,75,853	...	—12,54,039
1900	17,41,74,604	1,29,75,223	77,13,050	4·43	64,90,647	...	+12,22,413
1901	21,19,23,276	1,30,77,769	61,48,648	2·90	79,88,163	1,78,810	—20,18,325
1902	22,51,91,979	1,42,18,227	69,79,346	3·10	85,44,311	41,604	—16,06,569
1903	24,97,58,940	1,55,47,702	70,45,255	2·82	89,66,131	4,067	—19,24,943
1904	26,14,35,453	1,89,12,137	95,87,128	3·67	95,41,624	355	+45,347
1905	27,33,72,570	2,44,70,900	1,34,04,052	4·90	1,00,32,318	...	+33,71,734

TABLE II.

Calendar year.	Nagpur-Chattisgarh, 3′ 3″.		Katni-Umaria, 5′ 6″.		(a) Bengal-Nagpur, 5′ 6″.		(b) & (c) Jubbulpore-Gondia extension and Raipur-Dhamtari branches, 2′ 6″.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.	
1879	...	...	...	...	...	...	...	...
1880	51	79·54	...	...	...	...	...	...
1881	87	76·53	...	...	...	...	...	...
1882	114	68·70	...	...	...	...	...	...
1883	170	48·19	...	...	...	...	...	...
1884	171	57·82	...	...	...	...	...	...
1885	183	65·12	...	...	...	...	...	...
1886	184	62·51	87	104·35	...	...	...	...
1887	177	59·09	41	116·41	...	...	...	...
1888	...	...	...	...	164	67·58	...	...
1889	...	...	...	...	131	80·93	...	...
1890	...	...	...	...	101	80·89	...	...
1891	...	...	...	...	129	50·31	...	...
1892	...	...	...	...	141	50·55	...	...
1893	...	...	...	...	144	49·17	...	...
1894	...	...	...	...	149	51·30	...	...
1895	...	...	...	...	153	48·49	...	...
1896	...	...	...	...	142	54·03	...	...
1897	...	...	...	...	136	51·94	...	...
1898	...	...	...	...	143	51·10	...	...
1899	...	...	...	...	152	47·96	...	...
1900	...	...	...	...	207	40·56	...	...
1901	...	...	...	...	161	52·88	25	72·13
1902	...	...	...	...	176	51·09	21	77·27
1903	...	...	...	...	178	54·63	27	61·98
1904	...	...	...	...	210	48·97	31	67·32
1905	...	...	...	...	270	44·53	42	71·83

1 (*c*) Mourbhanj railway (2′ 6″ gauge)—

Details of construction—

This railway is 32·41 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way.—The line is laid with 30-lb. flat-footed steel rails on sāl sleepers.

Ballast.—The line is ballasted with screened laterite, gravel and broken laterite.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The line is worked under an agreement between the Maharaja of Mourbhanj and the Bengal-Nagpur Railway Company, approved in Railway Board's letter No. 223 R.T. of the 10th March 1905.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Maharaja of Mourbhanj.

Currency of agreement.—To the end of 1905.

Terms of working.—Actual cost.

Rates and fares.—To be fixed by the Company.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1905	6,21,895	31,494	7,422	1·19	20	76·43

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 1}}{\text{Sub-heads (a) to (g)}}$. **BENGAL-NAGPUR RAILWAY SYSTEM—*concld.***

1 (*d*) Parlakimedi Light railway (2′ 6″ gauge)—

On the 20th May 1901 the Indian Railways Act, 1890 (IX of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur railway from the 1st January 1902.

Details of construction—

This railway is 24·62 miles long. Its construction was sanctioned in 1898 and it was opened in 1900. It runs from Naupada to Parlakimedi.

Permanent-way.—The line is laid with 30-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast.—The line is ballasted throughout with laterite, gravel and stone.

Fencing.—Short lengths of fencing have been provided in a few places where the railway in cutting runs alongside the road.

Curves.—There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Parlakimedi Light railway is worked under an agreement, dated the 14th April 1902, between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Raja of Parlakimedi.

Currency of agreement.—The agreement was current to end of 1905, subject to renewal.

Terms of working.—Actual cost.

Rates and fares.—To be fixed by the Company.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1903	7,10,974	16,683	—9,285	...	13	155·70
1904	7,10,974	20,675	—1,301	...	16	106·29
1905	7,10,975	27,181	4,481	0·63	21	83·51

1 (*f*) Gondia-Chanda railway (2′ 6″ gauge)—

Details of construction—

This railway, which runs from Gondia to Chanda (148·65 miles), with a branch from Pauni to Nagpur (63·75 miles), total length 212·40 miles, was sanctioned in 1904 and work was started in November 1905.

1 (*g*) Purulia-Ranchi railway (2′ 6″ gauge)—

Details of construction—

This railway, which runs from Purulia to Ranchi (72·28 miles), was sanctioned in 1905, and construction was commenced in November of that year.

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—**

Lines comprising the system—The Bombay, Baroda and Central India railway system is made up of—

		Open line.	Under construction or sanctioned for construction.	Total.
		Miles.	Miles.	Miles.
(*a*) Bombay, Baroda and Central India railway	(5′ 6″ gauge) 465·12 / (3′ 3½″ gauge) 39·23	504·35	...	504·35
(*b*) Godhra-Rutlam-Nagda railway	(5′ 6″ gauge)	141·14	...	141·14
(*c*) Nagda-Ujjain railway	(5′ 6″ gauge)	34·32	...	34·32
(*d*) Petlad-Cambay railway (Anand-Tarapur section)	(5′ 6″ gauge)	21·50	...	21·50
(*e*) Petlad-Cambay railway (Tarapur-Cambay section)	(5′ 6″ gauge)	10·92	1·39	12·31
(*f*) Tapti Valley railway	(5′ 6″ gauge)	155·48	...	155·48
(*g*) Ahmedabad-Dholka railway	(3′ 3½″ gauge)	33·50	...	33·50
(*h*) Ahmedabad-Parantij railway	(3′ 3½″ gauge)	54·70	...	54·70
(*i*) Gaekwar's Mehsana railway	(3′ 3½″ gauge)	92·63	38·11	130·74
(*j*) Jaipur (Siwai-Madhopur) railway	(3′ 3½″ gauge)	32·18	40·67	72·85
(*k*) Palanpur-Deesa railway	(3′ 3½″ gauge)	17·28	...	17·28
(*l*) Rajputana-Malwa railway	(3′ 3½″ gauge)	1,782·38	...	1,782·38
(*m*) Vijapur-Kalol-Kadi railway	(3′ 3½″ gauge)	41·37	...	41·37
(*n*) Gaekwar's Dabhoi railway	(2′ 6″ gauge)	94·49	...	94·49
(*o*) Rajpipla railway	(2′ 6″ gauge)	37·37	...	37·37
	Total	3,053·61	80·17	3,133·78

Running powers—

	Miles.
Home line over foreign line —	
Dadar Junction to Carnac bridge, Great Indian Peninsula railway (for goods trains only)	4·39
Foreign lines over home line :—	
East Indian railway, Agra East Bank to Agra Fort (for goods trains only)	1·00
Great Indian Peninsula railway at Ujjain (for passenger and goods trains)	0·24
" " " Dadar Junction to Colaba (for goods trains only)	7·25
" " " at Agra (for passenger and goods trains)	2·89
Total	11·38

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—

Details of construction—

The open mileage amounts to 504·35 miles, which may be divided into 389·35 miles of main line, and 115 miles of branches. 251·90 miles are double line.

First sanction to the construction of the main line (Bombay (Colaba) to Wadhwan) was accorded in 1856 and the line was opened throughout in 1872.

Permanent-way.—The main line is laid with 69-lb. double-headed and 82-lb. bull-headed steel rails on creosoted pine and oval pot sleepers.

The branches are laid mostly with 69-lb. double-headed and 41½-lb., 48-lb., 50-lb. and 75-lb. flat-footed steel rails on oval pot and wooden sleepers.

Ballast.—The line is mostly ballasted with broken stone, gravel and shingle.

Fencing.—The line is fenced throughout except the Baroda-Godhra Chord which is being fenced.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Patri branch of 2,865 feet radius, and on the Godhra-Baroda Chord of 1,910 feet radius.

Gradients.—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 and even 1 in 100 at the approaches to major bridges. On the Godhra branch the ruling grade is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Patri branch and the Godhra-Baroda Chord it is 1 in 300, except for short lengths of 1 in 200 on the latter.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—21st November 1855—for the construction and working of a line from Surat to Baroda and thence to Ahmedabad.

2nd February 1859—for the construction and working of a line from Bombay to Surat as one undertaking.

17th November 1871—for the construction and working of an extension line to Viramgam and Wadhwan.

14th May 1886—Supplemental to that of 1855, incorporating the branch line from Anand to Dakor and its extension to Pali (Sevalia) and Godhra with the general undertaking.

1st February 1901—as to share of working expenses debitable to branch lines worked.

The general conditions of the contracts are as follows:—

Government aid.—Guarantee of interest in sterling at 5 per cent. for the term of the contract. On some portion of the share capital and on debentures lower rates of interest are also guaranteed.

Currency of contracts.—The contracts are current for a period of 99 years from 1855, after which the line becomes the property of Government on payment of the actual capital outlay in sterling. The Government may, however, determine the contracts by purchase after the expiration of 25 or 50 years of the term, namely, in 1880 or 1905, at the mean market value of the shares during the three preceding years, possession being taken of the railway at the half-yearly day next but one following the notice. The Government may also determine the contracts at any time, on giving three months' notice, if the Company fails to observe its obligations. In such case, Government repay the capital expended.

NOTE.—The Government relinquished their right to determine the contracts at the end of the 25th year; but on the 10th May 1905 the Secretary of State for India gave notice of his intention to terminate the contracts, by purchase of the Company's property, with effect from the 1st January 1906, after which date the line will be worked by a re-constituted Company under a new contract.

Power of Company to surrender contracts.—The Company may surrender, on six months' notice, at any time receiving back the capital expended.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 to be classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 5,000 in each half-year) surplus profits, after repayment of the guaranteed interest of each half-year, are divided equally between Government and the Company; the interest payments being calculated for the purpose of this division at 1*s.* 10*d.* to the rupee.

Rates and fares.—Under the contract, Government fixed maxima rates and fares which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot also be altered by the Company without Government sanction. Authority has, however, been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 108.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*a*) Bombay, Baroda and Central India railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Guaranteed interest (converted at current rates of exchange).	Company's share of net earnings (arrived at under terms of contract).	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	8,54,16,162	71,52,738	32,13,354	3·76	43,69,254	...	−11,55,900
1880	8,47,31,626	82,44,376	47,34,654	5·58	43,69,254	5,83,846	−8,02,293
1881	8,68,45,448	97,45,133	56,78,755	6·55	43,69,254	8,80,798	+4,78,703
1882	8,75,89,091	1,01,76,190	50,15,619	5·73	43,07,734	8,06,346	−98,461
1883	8,89,91,377	1,19,22,209	67,16,067	7·54	43,38,189	11,44,829	+12,33,049
1884	9,02,[illegible],608	1,21,95,590	68,87,562	7·63	49,99,341	13,17,768	+5,70,453
1885	9,22,58,636	1,31,40,336	74,01,967	8·02	52,35,189	14,57,541	+7,89,257
1886	9,16,82,002	1,35,05,635	78,73,228	8·50	55,87,440	16,97,985	+5,87,803
1887	9,32,12,200	1,21,64,856	69,98,127	7·50	57,17,318	12,56,055	+24,754
1888	9,45,87,848	1,27,38,933	70,48,164	7·45	60,29,893	12,68,879	−2,50,608
1889	9,49,45,797	1,32,34,871	75,41,081	7·94	61,10,257	14,86,390	−55,566
1890	9,58,16,045	1,29,40,370	74,23,195	7·79	54,66,227	14,22,120	+5,34,848
1891	9,55,86,799	1,41,37,769	82,25,120	8·60	58,61,996	18,06,348	+5,56,776
1892	9,55,28,735	1,42,44,473	81,30,959	8·51	65,57,945	17,86,755	−2,13,741
1893	9,62,57,802	1,50,96,045	95,78,044	9·95	66,44,227	25,09,537	+4,24,280
1894	9,77,45,855	1,59,48,484	1,00,70,974	10·30	76,09,071	27,35,713	−2,73,810
1895	9,97,90,965	1,75,53,067	1,09,37,063	10·96	77,03,258	31,37,619	+96,186
1896	10,31,57,107	1,62,03,933	89,00,862	8·60	73,03,613	20,78,128	−4,80,879
1897	10,63,19,220	1,42,61,293	64,70,202	6·09	69,36,858	2,51,545	−14,18,196
1898	10,85,69,144	1,58,62,726	87,42,205	8·05	67,87,071	19,49,477	+5,657
1899	11,46,73,558	1,74,65,945	92,90,345	8·15	67,46,868	21,68,922	+3,74,775
1900	11,60,94,044	1,75,98,486	82,28,632	7·08	68,35,449	15,68,577	−1,75,394
1901	11,95,61,022	1,59,38,796	87,53,789	7·32	70,04,569	18,11,890	−62,670
1902	12,18,78,965	1,57,43,536	79,37,622	6·51	71,28,187	12,93,644	−4,84,209
1903	12,37,33,389	1,69,63,028	84,95,201	6·87	72,59,871	15,12,518	−2,77,188
1904	12,44,90,478	1,78,23,863	93,87,312	7·54	73,86,912	18,91,136	+1,09,264
1905	12,52,43,397	1,93,82,065	1,08,90,134	8·70	73,82,579	26,03,040	+9,04,506

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.			Rs.			Rs.			Rs.	
1860	49	70·17	1872	290	59·97	1884	509	42·95	1896	676	45·07
1861	73	54·97	1873	260	59·23	1885	548	43·11	1897	595	54·63
1862	94	50·14	1874	565	52·12	1886	564	41·12	1898	662	44·89
1863	138	49·51	1875	285	54·41	1887	508	41·89	1899	729	46·81
1864	156	85·33	1876	296	54·74	1888	532	44·11	1900	734	52·50
1865	223	63·33	1877	345	41·97	1889	552	42·44	1901	665	44·06
1866	278	71·93	1878	298	46·61	1890	540	42·06	1902	659	49·00
1867	291	66·56	1879	309	46·97	1891	590	41·23	1903	753	49·46
1868	287	73·66	1880	355	42·57	1892	594	42·92	1904	718	47·12
1869	307	74·32	1881	423	41·04	1893	630	36·55	1905	780	43·78
1870	327	60·54	1882	427	50·76	1894	665	36·85			
1871	300	59·98	1883	497	43·10	1895	732	37·69			

2 (*b*) Godhra-Rutlam-Nagda railway (5′ 6″ gauge)—

Details of construction—

This railway is 141·14 miles long. Its construction was sanctioned in 1890 and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel, deodar and creosoted pine sleepers.

Ballast.—The line is ballasted throughout with broken stone and gravel.

Fencing.—There are 76½ miles of fencing. The rest of the line is unfenced except in station yards.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200, with short lengths of 1 in 100 and from 1 in 101 to 1 in 150 between Godhra and Jekot.

Terms of contracts—

This is a State line and is worked as a part of the Rajputana-Malwa railway under the contracts and conditions relating to that railway.

Statistics of working—

Included with the Rajputana-Malwa railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$ **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*c*) Nagda-Ujjain railway (5′ 6″ gauge)—

Details of construction—

This railway is 34·32 miles long. Its construction was sanctioned in 1894, and it was opened throughout in 1896.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The line is owned by the Gwalior State and worked under the following:—

Agreement of—15th July 1896 (between His Highness the Maharaja Scindia and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—Nil. The line is the property of the Scindia State.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement.— } party expiring on the 30th June or 31st December in any year.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Nagda-Ujjain railway.

Rates and fares.—Conform generally with those in force on the Godhra-Ratlam-Nagda railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	5,33,660	...	...	...	...	...
1896	20,71,251	40,701	17,762	0·86	49	56·36
1897	22,19,919	1,04,639	47,756	2·15	58	54·36
1898	22,31,596	1,29,627	71,509	3·20	73	44·83
1899	22,34,346	1,47,175	77,732	3·48	83	47·18
1900	22,29,758	2,51,783	1,20,956	5·42	141	51·96
1901	22,31,982	1,13,366	67,208	3·01	63	40·19
1902	22,39,663	1,57,211	85,851	3·85	88	45·39
1903	22,41,280	1,20,951	62,949	2·81	68	47·95
1904	22,41,231	1,23,654	66,441	2·96	69	46·27
1905	22,40,441	1,71,435	99,907	4·46	96	41·72

2 (*d*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—

Details of construction—

This section of the Petlad-Cambay railway is 21·50 miles long. Its construction was sanctioned in 1888, and it was opened throughout in 1901.

Permanent-way.—The permanent-way consists of 66½-lb. flat-footed steel rails on steel sleepers from Anand to Petlad and on creosoted pine sleepers from Petlad to Tarapur.

Ballast.—The line is ballasted with gravel.

Fencing.—Thirteen miles, between Anand and Petlad, are fenced. The rest of the line is unfenced, except in station yards.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 200.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*d*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—*concld.*

Terms of contracts—

The line is owned by the Baroda State and worked under the following :—

Agreement of—5th May 1890 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows :—

Government aid.—Nil. The line is the property of the Baroda State.

Currency of agreement.— } Either party may terminate the agreement at any time on giving one year's
Power to determine agreement.— } notice.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Petlad-Cambay, Gaekwar's Mehsana and Vijapur-Kalol-Kadi railways.

Rates and fares.—To be fixed from time to time by the Company with the approval of His Highness' Government and, as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	TABLE II. Gaekwar's Petlad, 5′ 6″. Earnings per mile per week.	Gaekwar's Petlad, 5′ 6″. Proportion of expenses to earnings.	Petlad-Cambay (Anand-Tarapur section), 5′ 6″. Earnings per mile per week.	Petlad-Cambay (Anand-Tarapur section), 5′ 6″. Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.		Rs.	
1888	11,030	...	...	...	...	...	...	...
1889	4,71,822	...	...	...	...	...	...	...
1890	6,47,922	32,649	20,870	3·22	71	36·08	...	...
1891	7,10,118	59,113	36,346	5·12	85	38·51	...	...
1892	7,11,081	61,243	34,757	4·89	88	43·25	...	...
1893	7,12,788	62,953	40,637	5·70	92	36·47	...	...
1894	7,23,482	69,668	44,037	6·09	100	36·79	...	...
1895	7,23,189	73,891	46,584	6·44	106	36·96	...	...
1896	7,23,616	1,17,540	82,847	11·45	169	29·52	...	...
1897	7,55,769	64,737	33,946	4·49	93	47·56	...	...
1898	7,49,047	51,121	28,156	3·76	74	44·92	...	...
1899	7,52,439	70,668	39,312	5·22	102	44·37	...	...
1900	7,52,097	88,481	41,713	5·55	127	52·86	...	...
1901	11,86,381	93,233	51,769	4·36	...	...	101	44·47
1902	11,85,930	1,05,951	56,818	4·79	...	...	95	46·37
1903	11,48,092	98,451	50,289	4·38	...	...	88	48·92
1904	11,46,552	1,20,974	64,876	5·66	...	...	108	46·37
1905	11,31,273	1,40,463	81,966	7·25	...	...	126	41·65

2 (*e*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—

Details of construction—

This section of the Petlad-Cambay railway is 12·31 miles long, which includes the length of 1·39 miles from Cambay to Cambay Bandar, opened in 1906. It was sanctioned in 1899 and was opened to Cambay in 1901.

Permanent-way.—The permanent-way consists of 66¼-lb. flat-footed steel rails on creosoted pine sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 600, with a little bit of 1 in 200 between Sayama and Cambay.

Terms of contracts—

The line is owned by the Cambay State and worked under—

Agreement of—17th May 1902 (between the Cambay State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The line is the property of the Cambay State.

Currency of agreement.— } The agreement may be terminated at any time on one year's notice from either
Power to determine agreement.— } party expiring on the 30th June or 31st December in any year.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*e*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India railway) excluding 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Tarapur-Cambay railway.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Cambay State and as far as possible, to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	7,49,676	12,011	5,950	0·79	40	50·46
1902	7,49,676	25,497	13,622	1·81	45	46·57
1903	7,49,676	25,151	12,803	1·71	44	49·10
1904	7,68,728	32,199	17,276	2·25	57	46·35
1905	8,06,482	33,638	19,603	2·43	59	41·72

2 (*f*) Tapti Valley railway (5′ 6″ gauge)—

Details of construction—

This railway connects Kankra Khari, a station on the main line of the Bombay, Baroda and Central India railway, with Amalner. It is 155·48 miles long. It was opened in 1900.

Permanent-way.—The permanent-way consists of 70-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient of the line is 1 in 200.

Terms of contracts—

The line is owned by the Tapti Valley Railway Company and worked under the following contracts:—

Contracts of—28th August 1896 (between the Secretary of State and the Tapti Valley Railway Company) for construction.

30th October 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintenance and working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Tapti Valley railway, so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* a sum of Rs. 6,000 per annum towards the Company's office expenses and expenses of management. Land in British territory was provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1921, or at the end of any subsequent period of 10 years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such capital expenditure; or Government may determine it on the 31st December 1950, paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to construct (from funds supplied by the Company), work and maintain the line through State or other agency, the necessary rolling-stock being supplied by the working agency. The general working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, are divided in proportion to the gross earnings of the component parts, the Tapti Valley railway being debited with the share thus arrived at (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), subject to a maximum charge of 44 per cent. of its gross earnings for the year. The residue of the gross earnings is payable to the Tapti Valley Railway Company.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*f*) Tapti Valley railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Table I.								Table II.		Remarks.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from B.,B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1896	8,390	...	...	...	...	...	...	...	...	The net earnings for 1898, 1899 and 1st-half of 1900 were credited to interest on capital, and those for 2nd-half of 1900 (including rebate) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of 1901.
1897	20,96,294	...	...	...	...	...	...	...	...	
1898	60,45,413	2,836	...	...	...	...	...	18	48·70	
1899	1,21,09,133	2,42,593	...	...	...	...	...	71	47·40	
1900	1,28,31,291	6,68,475	...	...	...	...	...	84	44·00	
1901	1,29,18,730	6,00,553	3,42,243	2·65	33,226	3,75,469	2·90	74	43·01	Excluding interest, Rs. 4,483, on the capital cost of works at Amalner junction, the percentage of income on capital outlay in 1903 was 4·00.
1902	1,29,70,581	8,26,485	4,64,242	3·57	45,196	5,08,438	3·92	102	43·95	
1903	1,30,02,400	8,62,753	4,83,142	3·72	40,258	5,23,400	4·03	107	44·00	
1904	1,30,77,018	6,58,740	3,68,894	2·82	28,441	3,97,335	3·04	81	44·00	
1905	1,30,83,629	10,11,222	5,86,921	4·49	2,928	5,89,849	4·51	125	41·95	

2 (*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—

Details of construction—

This railway connects Sabarmati, a station on the Rajputana-Malwa railway, with Dholka. It is 33·50 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on deodar sleepers.

Ballast.—Ballast is provided only at points and crossings, and for 100 feet on each side of bridges and level crossings.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—25th March 1902 (between the Secretary of State and the Ahmedabad-Dholka Railway Company) for construction.

18th July 1902 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the contracts are as follows :—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Dholka railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 30th June 1922 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines, proportionate to its total earnings, but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Dholka Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maxima and minima rates and fares in force on the undertaking.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

2 (*g*) Ahmedabad-Dholka railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from Bombay, Baroda and Central India railway.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903	10,13,420	64,261	35,998	3·55	...	35,998	3·55	45	44·00
1904	10,17,308	99,044	55,465	5·45	...	55,465	5·45	57	44·00
1905	10,44,995	98,214	57,203	5·47	...	57,203	5·47	56	41·76

2 (*h*) Ahmedadad-Parantij railway (3′ 3⅜″ gauge)—

Details of construction—

This railway connects Ahmedadad, a station on the Bombay, Baroda and Central India railway, with Idar Road. It is 54·70 miles long. Its construction was sanctioned in 1896 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The line is ballasted with kunkur, sand and stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The Ahmedabad-Parantij railway is worked under the following contracts:—

Contracts of—13th March 1896 (between the Secretary of State and the Ahmedabad-Parantij Railway Company) for construction.

4th June 1896 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for working.

1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions of the contracts are as follows:—

Government aid.—A rebate is allowed up to 10 per cent. of the gross earnings of the Bombay, Baroda and Central India and Rajputana-Malwa railways from traffic interchanged with the Ahmedabad-Parantij railway so as to make up an amount equal to interest for the year at the rate of 4 per cent. per annum on the actual capital expenditure, *plus* Rs. 5,000 per annum towards the Company's office expenses and expenses of management. Land provided free.

Currency of contracts.—Government may, by giving 12 months' notice, determine the contracts on the 31st December 1917 or at the end of any subsequent period of ten years, paying the Company in rupees a sum equal to 25 times the average yearly net earnings of the Company during the last preceding five years, but not exceeding by more than 20 per cent. the total capital expenditure of the Company, nor being less than such capital expenditure, or on the 31st December 1946 paying the Company in rupees an amount equal to the total capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) excluding the 2′ and 2′ 6″ gauge lines, proportionate to its total earnings but not exceeding 44 per cent. of its gross earnings for the year. The net earnings thus arrived at are payable to the Ahmedabad-Parantij Railway Company.

Rates and fares.—To be arranged from time to time between Government and the working agency within the maximum and minimum rates and fares in force on the Rajputana-Malwa railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from B., B. & C. I. Ry.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	13,12,752	...	...	...	...	...	...	...	...
1897	19,42,211	69,069	36,665	1·89	...	36,665	1·89	46	46·92
1898	19,42,971	1,49,799	85,836	4·42	...	85,836	4·42	33	42·70
1899	19,49,616	2,10,634	1,21,687	6·24	...	1,21,687	6·24	74	42·23
1900	19,55,305	2,65,105	1,55,952	7·98	...	1,55,952	7·98	93	41·17
1901	19,49,355	1,77,438	99,365	5·10	...	99,365	5·10	62	44·00
1902	19,70,012	1,79,794	1,00,685	5·11	...	1,00,685	5·11	63	40·04
1903	19,88,869	1,50,112	81,063	4·45	...	84,063	4·45	53	44·00
1904	19,89,045	1,86,227	1,04,237	5·24	...	1,04,237	5·24	65	44·00
1905	19,91,753	1,98,718	1,15,469	5·80	...	1,15,469	5·80	70	41·89

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*i*) Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—

Details of construction—

The total length of this railway is 92·63 miles. It consists of three branches, Mehsana to Kheralu, 27·73 miles, Mehsana to Viramgam, 40·21 miles, and Mehsana to Patan, 24·69 miles. The first branch was opened throughout in 1888 and the other two in 1891.

Besides the above 38·11 miles were sanctioned for construction in 1905.

Permanent-way.—The Kheralu and Viramgam branches are laid with 41¼-lb. flat-footed steel rails on transverse steel and deodar sleepers. The Mehsana-Patan section is laid with 40-lb. iron rails on deodar sleepers, except in station yards and for the first 3 miles which are laid with 41¼-lb. steel rails.

Ballast.—The line between Mehsana and Kheralu is ballasted with sand and the rest with kunkur.

Fencing.—The whole line, except 41¼ miles which are fenced by wire, was originally fenced with cactus; but this has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following:—

Agreement of—1st July 1891 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1887	13,55,493	27,890	5,564	0·41	33	80·05
1888	9,16,565	47,502	16,672	1·82	48	64·90
1889	11,18,446	55,290	20,348	1·83	37	61·82
1890	25,44,340	59,241	23,308	0·92	41	60·66
1891	29,04,050	1,94,247	1,05,801	3·64	49	45·53
1892	29,71,610	2,58,963	1,53,005	5·15	54	40·92
1893	30,26,752	3,36,359	1,98,250	6·55	70	41·12
1894	30,94,578	3,79,972	2,36,337	7·64	79	37·79
1895	32,55,044	3,38,444	2,02,440	6·22	70	40·18
1896	32,61,448	4,23,283	2,71,262	8·32	88	35·91
1897	32,63,900	3,39,125	1,18,358	3·63	70	46·58
1898	32,82,612	3,46,491	1,99,052	6·07	72	42·55
1899	32,83,612	3,76,160	2,16,654	6·60	79	42·40
1900	33,01,950	4,28,545	2,36,754	7·17	89	44·75
1901	33,48,911	3,92,227	2,15,111	6·42	81	45·16
1902	33,63,329	3,74,515	1,98,977	5·92	78	46·87
1903	33,78,132	3,47,083	1,77,466	5·25	72	48·87
1904	33,95,678	3,82,249	2,04,906	6·06	79	46·39
1905	34,36,885	4,52,184	2,62,904	7·65	94	41·86

2 (*j*) Jaipur (Siwai Madhopur) railway (3′ 3⅜″ gauge)—

Details of construction—

From Jaipur the Rajputana-Malwa railway is utilized as far as Sanganer, from which station this railway actually starts. The open mileage (Sanganer to Nawai) is 32·18 miles. It was sanctioned in 1897 and was opened in 1905.

There are 40·67 miles still under construction.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced except at stations and at points where the line crosses the main road.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The limiting gradient is 1 in 250 in the down direction and 1 in 200 in the up direction.

Terms of contract—

These are under consideration.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1905	27,57,448	12,299	6,779	0·25	52	44·88

2 (*k*) Palanpur-Deesa railway (3′ 3⅜″ gauge)—

Details of construction—

This railway is 17·28 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 40-lb. flat-footed iron rails, except in station yards and the first 3 miles of line which are laid with 41¼-lb. steel rails. The rails are laid on Denham-Olpherts' plate, cast iron pot, and steel dish cover sleepers.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*k*) Palanpur-Deesa railway (3′ 3½″ gauge)—*concld.*

Details of construction—*concld.*

Ballast.—The line is ballasted with stone and sand.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under—

Terms contained in letter No. 44 Ry., dated the 30th March 1892, from the Government of India to the Secretary of State, and letter No. 62 Ry., dated the 23rd June 1892, from the Secretary of State to the Government of India.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The general conditions are as follows:—

Government aid.—The line is owned jointly by Government and the Palanpur Durbar.

Currency of contract.—The contract is coterminous with the Company's contract for working the Rajputana-Malwa railway. In the event of the line being extended, Government can terminate the contract on giving the Company six months' notice.

Power of Company to surrender contract.—Nil.

Terms of working.—The railway is debited with a share of the working expenses of the system, excluding the 2′ and 2′ 6″ gauge lines, in proportion to the total earnings of the Palanpur-Deesa railway, the net earnings thus arrived at in any half-year being divided between Government and the Palanpur Durbar in proportion to the capital provided by each after excluding from the Government capital the sum of Rs. 25,117, the extra expenditure incurred in providing a 5′ 6″ gauge sub-structure.

Rates and fares.—Same as on the Rajputana-Malwa railway.

Statistics of working—

Calendar year.	Table I. Palanpur-Deesa (Native State section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Palanpur-Deesa (British section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1892	20,000	...	...	...	46,746	...	...	...	1,031	−1,031	...	...
1893	1,85,000	2,255	1,335	0·72	1,78,953	3,181	1,110	0·63	5,371	−4,261	33	44·87
1894	1,85,000	17,381	11,365	6·14	2,14,601	20,163	11,781	5·49	8,783	+2,998	42	38·35
1895	1,85,000	17,643	11,333	6·13	2,15,374	20,539	11,512	5·35	8,378	+3,134	42	40·17
1896	1,85,000	22,864	14,101	7·62	2,32,746	28,765	15,072	6·47	9,149	+5,923	57	43·59
1897	1,85,000	19,133	10,883	5·88	2,33,264	24,131	12,243	5·25	9,305	+2,938	48	46·15
1898	1,85,000	16,893	10,334	5·59	2,33,264	21,306	11,623	4·99	9,331	+2,297	43	42·50
1899	1,85,000	19,739	12,102	6·54	2,33,264	24,889	13,618	5·84	9,330	+4,288	50	42·37
1900	1,85,000	21,084	14,238	7·70	2,33,264	26,585	12,616	5·41	9,330	+3,286	53	43·66
1901	1,85,000	16,279	9,375	5·07	2,33,264	20,526	10,548	4·52	9,330	+1,218	41	45·87
1902	1,85,000	14,777	8,329	4·50	2,36,786	18,913	8,330	3·52	9,408	−1,078	37	47·01
1903	1,85,000	13,033	7,423	4·01	2,37,069	16,701	7,898	3·33	9,432	−1,534	33	48·47
1904	1,85,000	12,792	7,280	3·94	2,37,069	16,393	8,340	3·52	9,474	−1,134	32	46·48
1905	1,85,000	16,395	9,469	5·12	2,37,069	18,783	10,848	4·58	9,472	+1,376	39	42·24

2 (*l*) Rajputana-Malwa railway (3′ 3½″ gauge)—

The Maharaja Holkar lent the British Government one hundred lakhs of rupees at 4½ per cent. per annum for the construction of the Khandwa-Indore section, and is entitled to a moiety of surplus profits.

The Maharaja Scindia lent the British Government seventy-five lakhs of rupees at 4 per cent. per annum for the construction of the Indore-Neemuch section and the branch to Ujjain.

The Cawnpore-Achnera line was leased to the Bombay, Baroda and Central India Railway Company on the 1st October 1886, and is now treated as an integral part of the Rajputana-Malwa railway.

The Rajputana-Malwa railway system has been worked by the Bombay, Baroda and Central India Railway Company since the 1st January 1885.

Details of construction—

The open mileage of the Rajputana-Malwa railway is 1,782·38 miles. It is made up of the following sections:—(1) *Rajputana section,* main line (Delhi to Ahmedabad), 539·37 miles; Rewari-Bandikui-Phulera loop, 173·89 miles; and branches, 139·28 miles; (2) *Malwa section,* main line (Khandwa to Ajmer), 393·19 miles; branch, 14·28 miles; (3) *Cawnpore-Achnera section,* main line (Cawnpore to Achnera), 239·47 miles; branches, 21·33 miles; (4) *Rewari-Fazilka section,* 261·57 miles.

The Rajputana section was sanctioned in 1870 and was opened in 1881; the Malwa section was sanctioned in 1872, opened in 1881; the Cawnpore-Achnera section was sanctioned in 1874, opened in 1884; and the Rewari-Fazilka section was sanctioned in 1881, opened in 1885. 2·92 miles of the line are double track.

Permanent-way.—The Rajputana section is laid with 50-lb. flat-footed steel rails on deodar sleepers. The Malwa section has mixed 40-lb. iron, 41½-lb. and 50-lb. steel flat-footed rails on deodar sleepers. The Cawnpore-Achnera section has 41½-lb. and 50-lb. steel rails on deodar sleepers. The Rewari-Fazilka section has 41½-lb. steel rails on deodar sleepers.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2 (*l*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*contd.*

Details of construction—*concld.*

Ballast.—The line is ballasted throughout with stone, kunkur, sand and hard quartz.

Fencing.—The total length of line fenced on the Rajputana section is 669 miles. The Malwa section is fenced for 93½ miles and at stations. The Cawnpore-Achnera section is fenced on both sides for 145¼ miles on the main line, except for 7½ miles which are fenced on one side only. The Soron branch is fenced for 3¼ miles and the Brindaban branch for 3¼ miles. The Rewari-Bhatinda-Fazilka section is fenced for about 113¼ miles and at stations. On the Rewari-Phulera section only the Narnaul station yard is fenced.

Curves.—The sharpest curve is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 150, except on the Malwa section between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani where it is 1 in 40.

Terms of contracts—

The Rajputana-Malwa and Godhra-Rutlam-Nagda railways are worked together as one undertaking under the following contracts:—

Contracts of—24th September 1884.—The original contract (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) for maintaining and working the Rajputana-Malwa railway.

16th March 1888.—Contract supplemental to that of 1884 for maintaining and working the Cawnpore-Achnera railway as a part of the Rajputana-Malwa railway.

8th November 1889.—Contract supplemental to those of 1884 and 1888 for maintaining and working the Brindaban branch as a part of the Cawnpore-Achnera railway.

5th October 1893.—Supplemental to the original contract for maintaining and working the Godhra-Rutlam railway as a part of the Rajputana-Malwa railway.

1st October 1897.—Supplemental to those of 1884 and 1893 for maintaining and working the Rutlam-Nagda railway as a part of the Godhra-Rutlam railway.

1st February 1901.—Supplemental to those of 1884 and 1888 modifying the terms as to the division of working expenses.

The general conditions of the contracts are as follows:—

Government aid.—The line is the property of Government.

Currency of contracts.—The duration of the contracts is up to the 31st December 1905.

Power of company to surrender contracts.—Nil.

Terms of working.—The working expenses of the system (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), excluding 2′ and 2′ 6″ gauge lines, are pooled, and divided between the component parts of the system in proportion to the gross earnings of each. The net earnings thus arrived at of the Rajputana-Malwa, 3′ 3⅜″ gauge, and Godhra-Rutlam-Nagda, 5′ 6″ gauge, railways, are paid in full to Government.

Rates and fares.—Maximum and minimum rates and fares have been fixed within which the Company is authorised to vary the rates.

Statistics of working—

TABLE I (including the Godhra-Rutlam-Nagda railway).

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	7,06,47,354	38,64,997	15,41,903	2·18	28,43,439	...	−13,01,536
1880	8,38,87,014	59,12,511	17,33,714	2·07	35,81,449	...	−18,47,735
1881	9,30,43,645	94,70,410	35,9[illegible]014	3·86	37,48,505	...	−1,52,461
1882	9,94,83,933	1,14,82,614	52,84,668	5·31	38,74,919	...	+14,09,749
1883	11,08,57,933	1,35,64,166	63,39,208	5·72	40,74,808	...	+22,64,400
1884	11,92,08,595	1,46,20,446	61,92,677	5·19	43,90,548	...	+18,02,129
1885	12,22,63,117	1,73,00,501	79,71,964	6·52	49,10,379	...	+30,61,585
1886	12,86,59,407	1,82,98,610	89,55,549	6·99	51,72,731	6,28,054	+31,54,764
1887	12,87,69,487	1,65,28,203	81,24,547	6·31	51,96,578	5,06,190	+24,31,779
1888	12,96,59,656	1,86,14,714	96,31,727	7·43	52,27,345	4,99,908	+39,04,474
1889	13,02,53,556	1,99,70,005	91,32,788	7·01	52,48,893	3,56,110	+30,27,785
1890	13,00,01,510	1,74,28,281	86,12,525	6·65	52,61,288	6,57,951	+27,23,286
1891	13,17,20,440	2,17,89,570	1,23,17,065	9·35	53,13,844	8,78,835	+61,24,386
1892	14,34,24,072	2,24,00,454	1,32,14,774	9·21	56,14,176	13,45,763	+62,54,835
1893	14,30,06,325	2,26,33,265	1,33,25,640	9·32	57,00,808	13,24,918	+62,99,914
1894	14,72,89,588	2,51,44,200	1,54,75,342	10·51	58,77,844	15,63,148	+80,34,350
1895	15,55,56,871	2,45,42,974	1,41,02,338	9·26	59,78,606	16,21,635	+68,02,117
1896	15,03,08,348	2,10,21,002	1,13,79,807	7·57	60,65,242	9,93,351	+43,23,214
1897	14,94,51,054	1,84,74,858	1,00,92,908	6·76	60,48,581	5,09,720	+35,88,707
1898	15,03,74,730	2,23,17,815	1,19,05,991	7·91	60,77,309	9,53,967	+48,74,715
1899	15,14,26,773	2,60,94,541	1,47 20,148	9·73	60,92,658	9,92,364	+76,45,126
1900	15,31,25,211	2,91,75,054	1,60,55,050	10·48	61,35,151	21,67,610	+77,52,289
1901	15,48,58,624	2,78,62,296	1,44,89,645	9·65	61,89,498	13,785	+82,86,362
1902	15,64,35,445	2,58 96,694	1,36,25,409	8·71	62,89,315	...	+73,45,094
1903	15,76,84,717	2,27,25,664	1,12,42,360	7·18	62,84,957	5,644	+50,51,759
1904	16,17,31,683	2 33,65,288	1,21,57,833	7·52	64,55,047	...	+57,02,786
1905	16,28,49,528	2,84,44,243	1,62,29,896	9·97	64,41,437	...	+97,88,459

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$ · **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM**—*contd.*

2. (*l*) Rajputana-Malwa railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—*concld.*

TABLE II.

Calendar year.	Rajputana-Malwa, 3′ 3⅜″.		Holkar and Sindia-Neemuch, 3′ 3⅜″.		Western Rajputana, 3′ 3⅜″.		Rewari-Ferozepore, 3′ 3⅜″.		Muttra-Hathras, 3′ 3⅜″.		Cawnpore-Farukhabad, 3′ 3⅜″.		Muttra-Achnera, 3′ 3⅜″.		Cawnpore-Achnera, 3′ 3⅜″.		Godhra-Rutlam-Nagda, 5′ 6″.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1873	32	96·59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1874	69	80·37	60	84·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1875	98	64·04	123	91·71	...	...	...	...	108	58·18	...	...	...	...	...	...	...	...
1876	114	65·40	99	92·37	...	...	...	...	55	57·74	...	...	...	...	...	...	...	...
1877	130	67·99	86	76·86	...	...	...	...	66	54·86	...	...	...	...	...	...	...	...
1878	136	61·97	122	67·50	...	...	...	...	65	53·33	...	...	...	...	...	...	...	...
1879	153	66·74	128	74·53	86	86·08	...	...	83	54·97	...	...	...	...	...	...	...	...
1880	152	66·88	118	74·74	151	85·79	...	...	89	57·35	18	233·15	...	...	...	...	...	...
1881	189	60·41	132	69·11	...	...	...	...	90	69·19	65	69·76	39	89·01	...	...	...	...
1882	188	53·07	...	...	...	...	...	...	84	76·97	80	67·86	57	86·42	...	...	...	...
									Included with Cawnpore-Achnera.									
1883	219	52·18	...	...	...	...	75	81·28	...	...	...	...	...	...	80	63·98	...	...
1884	223	56·92	...	...	...	...	96	67·28	...	...	...	...	...	...	81	69·17	...	...
1885	224	52·81	...	...	...	...	...	...	...	...	...	...	...	...	70	87·37	...	...
1886	212	50·37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1887	191	50·84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1888	215	48·26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1889	230	45·82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1890	200	50·41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1891	251	43·47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1892	257	41·01	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1893	259	41·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	41·61
1894	285	38·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	106	40·64
1895	269	46·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	184	57·01
1896	227	44·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	189	62·27
1897	212	36·60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146	72·02
1898	241	43·83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	181	51·14
1899	285	42·06	...	...	...	...	...	...	...	...	...	...	...	...	...	...	172	58·84
1900	317	43·18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	219	46·34
1901	313	46·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156	45·15
1902	291	47·54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	140	46·27
1903	253	49·16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147	48·29
1904	260	47·63	...	...	...	...	...	...	...	...	...	...	...	...	...	...	158	47·62
1905	296	42·95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	224	42·78

2. (*m*) Vijapur-Kalol-Kadi railway (3′ 3⅜″ gauge)—

Details of construction—

This railway is 41·37 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way.—16 miles are laid with 41½-lb. flat-footed steel rails and 25 miles with 40-lb. flat-footed iron rails on deodar sleepers.

Ballast.—The line is ballasted with broken stone and shingle.

Fencing.—Only station yards and 11·07 miles of the Vijapur-Kalol section are fenced.

Curves.—The sharpest curve is of 3,820 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is the property of the Baroda State and is worked under the following :—

Agreement of—23rd November 1903 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

Contract of—1st February 1901 (between the Secretary of State and the Bombay, Baroda and Central India Railway Company) as to percentage of working charges.

The terms of working are the same as on the Petlad-Cambay railway (Anand-Tarapur section).

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1899	7,534	...	...	...	...	...
1900	29,885	...	...	...	...	...
1901	6,60,716	...	...	...	...	...
1902	10,47,188	19,514	9,226	1·18	23	52·72
1903	11,84,246	56,916	28,782	2·43	31	49·43
1904	13,35,402	74,572	40,083	3·00	35	46·25
1905	13,19,586	87,131	50,496	3·83	40	42,05

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (o)}}$. **BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.***

2. (*n*) Gaekwar's Dabhoi railway (2' 6" gauge)—

Details of construction—

The total length of the railway is 94·49 miles. It consists of three sections, Miyagam to Chandod, 30·62 miles; Dabhoi to Bodeli, 22·41 miles; and Dabhoi to Masor Road, 41·46 miles. The construction of these sections was first sanctioned in 1872, 1877 and 1879, respectively, and they were opened throughout in 1879, 1890 and 1904, respectively.

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on wooden sleepers, but there are still about 5 miles of 28-lb. iron rails in the road.

Ballast.—The line is chiefly ballasted with sand.

Fencing.—The line is practically unfenced except in station yards.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 400, with small lengths of 1 in 200 and 1 in 300.

Terms of contracts—

The line is owned by the Baroda State and worked under—

Agreement of—1st January 1897 (between the Government of His Highness the Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company) for working.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Baroda State.

Currency of agreement.—The agreement may be terminated at any time on one year's notice from either side to expire on the 30th June or 31st December.

Terms of working.—The Company work the railway at actual cost, *plus* 12½ per cent. of total working expenses (but not less than Rs. 500 per mensem or more than Rs. 800 per mensem, in a half-year) for superintendence.

Rates and fares.—The rates and fares are fixed from time to time by the Company with the approval of His Highness' Government, and as far as possible must conform generally with those in force on the Bombay, Baroda and Central India railway.

Statistics of working—

TABLE I.					TABLE II.			Remarks.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Calendar year.	Earnings per mile per week.	Pro: of exp: to earnings.	
	Rs.	Rs.	Rs.			Rs.		
1879	9,62,450	72,083	31,608	3·28	1873	21	96·34	
1880	11,65,510	1,23,825	65,138	5·59	1874	32	75·78	
1881	12,57,448	1,41,233	48,849	3·88	1875	33	78·11	
1882	12,78,942	1,44,022	46,747	3·66	1876	33	75·35	
1883	12,73,630	1,46,970	38,585	3·05	1877	45	78·20	
					1878	43	62·42	
					1879	46	56·15	
1884	12,80,177	1,49,091	48,560	3·80	1880	51	49·44	
1885	13,11,229	1,52,283	55,623	4·24	1881	46	65·41	
1886	13,58,502	1,58,699	39,398	2·90	1882	47	67·54	
1887	13,46,259	1,56,352	47,339	3·52				
1888	13,74,295	1,45,757	43,854	3·19	1883	48	73·75	
					1884	49	67·43	
					1885	50	63·47	
					1886	50	74·37	
1889	16,10,398	1,42,989	49,398	3·07	1887	51	69·73	
1890	17,53,977	1,95,028	74,570	4·25				
1891	17,94,157	2,01,165	68,126	3·80	1888	48	69·91	
1892	18,47,403	3,38,609	1,06,510	5·77	1889	47	65·45	
1893	18,55,158	2,52,106	1,32,507	7·14	1890	57	61·76	
					1891	54	66·13	
					1892	64	55·36	
1894	18,88,774	2,40,316	95,429	5·05	1893	68	47·44	
1895	19,08,757	2,34,473	96,764	5·02	1894	65	60·29	
1896	20,74,756	2,58,788	1,25,657	6·06	1895	63	58·73	
1897	21,08,574	2,20,901	50,949	2·42	1896	69	51·44	
1898	21,18,491	2,10,240	−26,592	...	1897	56	76·94	
					1898	51	112·65	
					1899	60	64·40	
1899	21,17,586	2,45,974	87,571	4·14	1900	57	73·82	
1900	21,17,328	2,35,281	61,603	2·44	1901	62	71·08	
1901	21,14,302	2,53,936	73,427	3·47	1902	54	65·69	
1902	22,34,829	2,22,573	76,367	3·62				
1903	23,60,528	2,60,550	7,467	0·32	1903	60	97·13	The decrease in net earnings in 1903 was due principally to the cost of 3 engines having been charged to Revenue.
1904	24,64,882	2,98,906	1,26,426	5·13	1904	65	57·70	
1905	24,72,909	3,72,467	2,04,004	8·25	1905	76	45·23	

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 2}}{\text{Sub-heads (a) to (e)}}$. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.*

2. (*c*) Rajpipla railway (2′ 6″ gauge)—

Details of construction—

This line, which connects Anklesvar with Nandod, is 37·37 miles long. Its construction was sanctioned in 1894 and it was opened in 1899.

Permanent-way.—The line is laid with 41¼-lb. flat-footed steel rails on half-round jungle teak sleepers.

Ballast.—The line is chiefly ballasted with coarse river sand.

Fencing.—Only the station yards and small lengths at miles 4 and 9 are fenced.

Curves.—The sharpest curve is of 1,432 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The line is owned by the Rajpipla State and is worked under—

Agreement of—19th March 1900 between the Rajpipla State and the Bombay, Baroda and Central India Railway Company.

The general conditions of the agreement are as follows:—

Government aid.—Nil. The line is the property of the Rajpipla State.

Currency of agreement.—The agreement may be terminated by either party on the expiration of three years or at the end of any calendar half-year thereafter, on one year's notice from either side.

Terms of working.—The Rajpipla State is debited with the actual cost of working; and in addition one per cent. on the net earnings of the Rajpipla railway as contribution to the Provident Fund and 12½ per cent. on total working expenses (but not less than Rs. 300 per mensem or more than Rs. 800 per mensem) for superintendence.

Rates and fares.—To be fixed from time to time by the Company with the approval of the Rajpipla State; and to conform with those generally in force on the Bombay, Baroda and Central India railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of exp; to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	12,674	...	...	...	...	...
1895	77,265	...	...	...	...	...
1896	4,09,141	...	...	...	...	...
1897	7,55,792	5,705	−6,534	...	11	214·53
1898	11,03,333	10,424	−9,172	...	11	186·53
1899	13,07,820	35,809	8,478	0·65	22	76·32
1900	13,10,159	49,463	12,139	0·93	25	75·46
1901	13,06,822	47,182	10,487	0·80	24	77·77
1902	13,05,415	38,726	10,131	0·78	20	73·84
1903	13,04,281	44,830	10,674	0·82	23	76·19
1904	13,04,522	49,207	16,880	1·29	25	65·68
1905	13,04,522	62,017	28,194	2·16	32	54·54

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (d)}}$. EASTERN BENGAL (STATE) RAILWAY SYSTEM—

Lines comprising the system.—The Eastern Bengal (State) railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5′ 6″ gauge)	497·95	11·00	508·95
(*b*) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3′ 3¾″ gauge)	682·00	263·12	945·12
(*b*) " " " " , Ranaghat-Krishnagar and Teesta-Kurigram branches and British section of the Santrabari Extension (2′ 6″ gauge)	55·03	...	55·03
(*c*) Mymensingh-Jamalpur-Jagannathganj railway (3′ 3¾″ gauge)	50·69	...	50·69
(*d*) Cooch Behar railway (2′ 6″ gauge)	33·60	...	33·60
Total	1,319·27	274·12	1,593·39

Running powers—

Foreign line over home line :— East Indian railway	Naihati to Brace Bridge Junction	for goods trains only	32·75
	Canal Junction to Chitpore		1·75
			34·50

3. (*a*) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5′ 6″ gauge)—

Details of construction—

The open mileage of the standard gauge portion of this system amounts to 497·95 miles, which may be divided into (1) *Eastern section*, main line, 145·07 miles, branches, 154·37 miles; (2) *Southern section*, main line, 29·20 miles, branches 41·62 miles; (3) *Central section*, main line, 104·51 miles, branches, 23·18 miles. There are 112·21 miles of double line. Besides the above there are under construction 8·75 miles of single, and 2·25 miles of double line; and 2·99 miles of double line are being quadrupled.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

3. (*a*) Eastern Bengal (State) railway, Eastern, Southern and Central sections (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Sanction was first given to the construction of the above mentioned sections of the Eastern Bengal (State) railway in 1859, 1862 and 1881, respectively, and they were opened throughout in 1871, 1863 and 1884.

Permanent-way.—The permanent-way on the double line portion of the Eastern section consists of 73-lb. and 75-lb. double-headed steel rails, with Denham-Olpherts' cast iron sleepers, except on the length between Calcutta and Naihati which is laid with 85-lb. bull-headed steel rails, with sal and jarrah sleepers at the joints. The single line portion of the Eastern section is also laid chiefly with 73-lb. and 75-lb. double-headed steel rails, the greater part on Denham and Olpherts' cast iron sleepers and the remainder on cast iron bowl and sal wood sleepers. The Murshidabad branch is laid with 75-lb. new pattern flat-footed steel rails on sal sleepers.

The double line portion of the Southern section and the Budge Budge branch are laid with 73-lb. double-headed steel rails on Denham and Olpherts' cast iron sleepers. The single line of the Southern section consists of 72-lb. and 73-lb. double-headed iron and steel rails mostly on Denham and Olpherts' cast iron sleepers. The Diamond Harbour branch is laid with 64-lb. and 73-lb. double-headed steel rails mostly on Denham and Olpherts' cast iron sleepers.

The Central section is laid with flat-footed steel rails 62 lbs. to the yard on sal sleepers.

Ballast.—The main line is ballasted throughout with brick ballast. Where 85-lb. bull-headed rails have been laid, brick ballast has been replaced by stone, and it is intended to stone ballast all track laid with 85-lb. rails.

Fencing.—The whole of the Eastern section is fenced, except between Panchooria Junction and Goalundo, and the Faridpur branch. The Southern section is fenced as far as Sonarpur; beyond Sonarpur to Canning there is no fencing. The Diamond Harbour and Budge Budge branches are fenced. The Central section is fenced throughout.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts.—*Nil.* The line is owned and worked by the State.

Statistics of working.—See pages 125 and 126.

3. (*b*) Eastern Bengal (State) railway, Northern, Behar, Dacca and Kaunia-Dhubri sections (3′ 3⅜″ gauge)—

Details of construction—

The metre gauge section comprises an open mileage of 682·00 miles and may be divided into (1) *Northern section*, main line, 196·85 miles, branches, 116·46 miles; (2) *Behar section*, main line, 84·86 miles, branches, 102·42 miles; (3) *Dacca section*, 85·92 miles; (4) *Kaunia Dhubri section*, main line, 51·02 miles and extension, 44·47 miles.

In addition to the above 263·12 miles are under construction.

Sanction was first given to the construction of the above mentioned sections in 1874, 1881, 1882 and 1899, respectively, and they were opened through in 1878, 1889, 1885 and 1902.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 50 lbs. and 41¼ lbs. per yard, on sal sleepers. On the Northern section, Sara to Siliguri, and the Brahmaputra-Sultanpur branch and on the Kaunia-Bonarpara extension of the Kaunia-Dhubri section, the rails are 50-lb. On the Behar and Kaunia-Dhubri sections, Manihari ghat to Dhubri, the greater part of the rails are 50-lb., and the remainder are 41¼-lb. On the Kosi branch and the Dacca section the rails are all 41¼-lb. On the Barsoi-Kissengunge branch the rails are mostly flat-footed iron, 40 lbs. per yard, the remainder being 41¼-lb. steel. The sleepers are mostly sal, but there are also metal sleepers of various types.

Ballast.—The whole of the line, except the portion from Golakganj Junction to Dhubri and the Kaunia-Bonarpara extension, is ballasted or shortly to be ballasted. The ballast is brick, stone and shingle.

Fencing.—The whole of the 3′ 3⅜″ gauge lines are fenced except the Brahmaputra-Sultanpur and Barsoi-Kissengunge branches, the Kaunia-Bonarpara extension and the portions from Golakganj Junction to Dhubri and Dacca to Mymensingh.

Curves.—The sharpest curve is of 1,416 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—See pages 125 and 126.

3. (*b*) Eastern Bengal (State) railway, Ranaghat-Krishnagar and Teesta-Kurigram branches, and the British section of the Santrabari extension (2′ 6″ gauge)—

The Teesta-Kurigram branch was originally a portion of the 2′ 6″ gauge lines from Teesta Junction to Mogalhat and Jatrapur, known as the Kaunia-Dharlla branch. The line from Teesta Junction to Mogalhat has been converted to the 3′ 3⅜″ gauge to form an integral part of the "Kaunia-Dhubri section." The line from Kurigram to Jatrapur has been abandoned. The Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal (State) railway system from 1st July 1904.

Details of construction—

The Ranaghat-Krishnagar branch is 20·25 miles long. Its construction was sanctioned in 1895 and it was opened in 1899.

The Teesta-Kurigram branch is 14·99 miles long; it was opened in 1881.

The British section of the Santrabari extension of the Cooch Behar State railway is 19·79 miles long. Its construction was sanctioned in 1897 and it was opened in 1901.

Permanent-way.—On the Ranaghat-Krishnagar and Teesta-Kurigram branches the rails are flat-footed steel, 25 lbs. per yard; the sleepers are pyinkado and sal. On the Santrabari extension the rails are flat-footed iron, 40 lbs. per yard, and flat-footed steel, 41¼ lbs. per yard, laid on sal sleepers.

Ballast.—The Ranaghat-Krishnagar branch is brick ballasted; the Teesta-Kurigram branch is not ballasted; and the Santrabari extension is now being ballasted with stone.

Fencing.—No lines on the 2′ 6″ gauge are fenced.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—No grade on the Ranaghat-Krishnagar and Teesta-Kurigram branches exceeds 1 in 200. On the Santrabari extension the ruling gradient is 1 in 100, and there is a short grade of 1 in 50 near the terminus (Jainti).

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—See pages 125 and 126.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd.***

3 (*a*) and (*b*) Eastern Bengal (State) railway (5′ 6″, 3′ 3⅜″ and 2′ 6″ gauge sections)—*contd.*

Statistics of working— TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Annuity.	Company's share of surplus profits.	Gain or loss to the State.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	6,23,44,476	60,22,372	25,79,314	4·14	28,51,165	...	3,67,326	−6,39,177	
1880	6,33,72,354	66,91,060	33,75,186	5·33	29,27,692	...	5,34,950	−87,456	
1881	6,39,51,905	75,05,736	42,86,406	6·70	28,50,922	...	8,24,125	+6,11,359	
1882	6,50,12,846	85,79,404	47,17,459	7·26	27,92,607	...	8,95,329	+10,29,523	
1883	7,01,85,023	80,73,465	47,10,716	6·76	29,48,783	...	4,98,223	+12,63,710	
1884	6,58,68,060	78,12,979	24,80,526	3·77	15,92,486	3,50,920	...	+5,37,120	
1885	7,91,60,273	72,85,916	25,25,336	3·45	21,82,794	7,22,920	...	−3,80,378	
1886	8,00,56,752	82,73,918	30,89,720	3·86	24,34,239	19,04,750	...	−12,49,269	
1887	8,11,53,166	94,30,399	45,04,782	5·55	41,71,608	14,90,152	...	−11,56,378	
1888	8,59,09,629	1,05,19,210	55,25,424	6·44	28,83,744	20,11,011	...	+6,30,669	
1889	8,79,71,516	1,11,76,674	61,91,625	7·04	30,18,703	20,48,953	...	+11,28,969	
1890	10,00,68,626	1,14,78,382	60,70,323	6·07	30,96,150	18,14,110	...	+11,60,063	
1891	10,31,46,023	1,26,75,440	65,32,100	6·33	33,97,743	17,51,621	...	+13,82,736	
1892	10,60,47,429	1,15,56,446	62,33,727	5·88	38,86,131	16,53,922	...	+6,93,624	
1893	10,68,29,000	1,20,51,147	66,35,138	6·21	39,53,310	16,49,185	...	+10,32,643	
1894	10,73,52,685	1,40,15,726	83,53,559	7·78	41,01,624	18,91,850	...	+23,60,035	
1895	10,71,92,132	1,45,09,789	89,74,474	8·37	41,50,415	18,72,565	...	+29,51,494	*Represents payment made to the Brahmaputra-Sultanpur Branch Railway Company up to 1st April 1904, on account of surplus profits and other adjustments.
1896	10,97,80,613	1,50,81,670	90,02,286	8·20	41,06,132	17,56,150	...	+31,40,004	
1897	11,47,69,205	1,47,62,233	80,60,612	7·02	42,80,503	16,58,278	...	+21,26,831	
1898	11,78,54,619	1,47,17,579	83,35,064	7·07	43,89,356	16,75,020	...	+23,70,688	
1899	12,16,49,777	1,56,12,496	83,01,083	6·82	45,00,276	15,82,391	...	+22,38,416	
1900	12,58,52,617	1,71,00,460	92,46,124	7·35	47,02,516	15,66,769	...	+29,77,139	
1901	13,19,95,226	1,65,99,440	83,06,281	6·29	41,11,665	23,37,123	...	+18,39,493	
1902	13,99,82,381	1,78,93,098	91,48,340	6·54	44,25,883	25,29,895	...	+23,92,562	
1903	14,91,79,763	1,81,52,429	88,57,094	5·94	47,14,867	23,33,377	...	+18,12,850	
1904	15,89,84,565	1,94,63,098	88,23,872	5·55	50,38,945	23,33,925	*33,597	+14,16,945	
1905	19,29,72,987	2,03,73,194	96,19,804	4·98	56,28,338	23,33,730	...	+16,57,836	

TABLE II.

Calendar year.	3 (*a*) Eastern, Southern and Central sections.				3 (*b*) Northern, Behar and Dacca sections.							
	Eastern, Southern and Central sections (5′ 6″ gauge).		Calcutta and South-Eastern section (5′ 6″ gauge).		Northern Bengal (State) (3′ 3⅜″ gauge).		Kaunia-Dharlla (2′ 6″ gauge).		Northern, Behar and Kaunia-Dhubri sections including the Ranaghat Krishnagar and Teesta-Kurigram branches and the British section of the Santrabari extension (3′ 3⅜″ and 2′ 6″ gauges).		Dacca section (3′ 3⅜″ gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1862	94	55·59	36	128·39	...	...	...	...	...	...	...	...
1863	149	48·43	88	131·07	...	...	...	...	...	...	...	...
1864	176	53·67	53	137·03	...	...	...	...	...	...	...	...
1865	233	48·98	75	114·32	...	...	...	...	...	...	...	...
1866	243	51·05	79	118·59	...	...	...	...	...	...	...	...
1867	279	48·71	64	133·66	...	...	...	...	...	...	...	...
1868	308	46·33	60	173·12	...	...	...	...	...	...	...	...
1869	313	50·29	55	145·54	...	...	...	...	...	...	...	...
1870	335	55·69	55	104·88	...	...	...	...	...	...	...	...
1871	270	56·01	40	90·82	...	...	...	...	...	...	...	...
1872	344	66·60	40	92·07	...	...	...	...	...	...	...	...
1873	377	49·08	70	102·56	...	...	...	...	...	...	...	...
1874	433	52·18	68	78·35	...	...	...	...	...	...	...	...
1875	356	62·16	71	80·48	...	...	...	...	...	...	...	...
1876	401	43·66	68	108·62	...	...	...	...	...	...	...	...
1877	529	41·07	79	81·74	20	140·29	...	...	...	...	...	...
1878	512	43·71	83	75·08	81	75·31	...	...	...	...	...	...
1879	494	45·97	92	66·44	101	99·96	...	...	...	...	...	...
1880	540	44·81	98	71·32	114	60·19	...	...	...	...	...	...
1881	621	40·91	104	66·43	137	51·23	...	...	...	...	...	...
1882	611	40·60	130	97·42	160	49·04	25	92·97	...	...	...	...
1883	466	50·14	109	54·97	169	49·20	33	81·49	...	...	...	...
1884	422	54·06	Included with Eastern and Southern sections.		156	60·93	39	78·26	...	...	...	...
1885	380	61·25			153	70·16	31	107·29	...	...	47	141 12
1886	403	61·97			169	52·85	29	122·87	...	...	56	111·47
1887	268	52·23			Included with Eastern and Southern sections.				Included with Eastern and Southern sections.			
1888	546	47·47	...	...								
1889	563	44·60	...	...								
1890	521	47·12	...	...	...	...	...	...				
1891	562	43·61	...	...	...	...	...	...	181	55·18	93	62·10
1892	562	44·22	...	...	...	...	...	...	165	47·32	85	64·30
1893	529	43·74	...	...	...	...	...	...	182	45·17	96	62·41
1894	621	40·33	...	...	...	...	...	...	191	39·14	112	54·36
1895	649	35·97	...	...	...	...	...	...	199	40 29	120	51·49
1896	676	39·74	...	...	...	...	...	...	212	40·04	115	53·27
1897	678	46·48	...	...	...	...	...	...	195	42·44	114	55·92
1898	652	41·86	...	...	...	...	...	...	201	44·88	129	51·68
1899	649	49·30	...	...	...	...	...	...	218	42·21	131	55·78
1900	689	47·75	...	...	...	...	...	...	245	42·14	146	58·83
1901	673	50·69	...	...	...	...	...	...	225	46·91	157	65·12
1902	728	48·18	...	...	...	...	...	...	225	48·65	146	62·12
1903	707	50·27	...	...	...	...	...	...	239	50·14	144	78·25
1904	751	53·14	...	...	...	...	...	...	233	55·69	145	67 62
1905	613	54·61	...	...	...	...	...	...	241	43 77	155	67·8

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads } (a) \text{ to } (d)}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM**—*contd.*

3 (*a*) and (*b*) Eastern Bengal (State) railway (5′ 6″, 3′ 3⅜″ and 2′ 6″ gauge sections)—*concld.*

Statistics of working—*concld.*

The tables below show the statistics of working of the Central section, the Brahmaputra-Sultanpur and Ranaghat Krishnagar branches before they were purchased by the State.

Central section (5′ 6″ gauge).

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings	Net earnings.	Percentage on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1881	10,51,983	...	...	...	51,616	...	−51,616	...	...
1882	46,37,355	...	...	...	1,85,534	...	−1,85,534	...	...
1883	79,36,235	1,07,954	−39,390	...	3,17,149	...	−3,56,839	64	126·50
1884	90,54,719	4,54,887	−1,19,682	...	3,62,189	...	−4,81,871	76	126·31
1885	90,04,061	5,35,953	8,233	0·09	3,60,162	...	−3,51,929	82	98·46
1886	89,65,705	5,67,343	−42,528	...	3,75,210	...	−4,17,738	87	102·70
1887	91,09,422	6,48,494	−7,928	...	4,60,840	...	−4,68,768	100	101·22
1888	92,53,170	7,12,901	1,58,145	1·71	5,19,942	...	−3,61,797	110	77·82
1889	94,46,671	7,37,191	2,95,983	3·13	5,18,693	...	−2,22,705	113	59·85
1890	96,88,212	6,67,804	2,45,907	2·54	4,99,962	58,992	−2,54,047	103	68·18
1891	99,44,845	8,11,636	3,27,735	3·30	4,72,482	73,429	−2,18,175	125	59·62
1892	1,00,65,784	7,69,347	3,12,903	3·11	5,30,251	74,600	−2,91,948	118	59·33
1893	1,00,88,983	7,83,529	3,14,992	3·12	5,37,007	79,647	−3,01,662	121	59·80
1894	1,01,41,094	8,20,179	2,41,182	2·37	6,11,415	...	−3,70,233	126	60·92
1895	1,01,77,466	9,47,891	3,98,809	3·92	6,08,944	85,023	−2,95,158	146	57·90
1896	1,05,38,927	9,33,266	3,44,465	3·20	5,69,175	91,306	−3,16,016	144	62·85
1897	1,17,36,810	11,38,199	5,16,922	4·40	5,26,809	95,371	−1,15,158	175	56·98
1898	1,23,58,300	10,24,657	3,68,008	2·98	5,19,231	1,20,642	−2,71,865	158	64·08
1899	1,26,78,629	11,39,689	4,41,613	3·48	5,67,035	97,581	−1,62,803	158	61·23
1900	1,26,96,415	13,33,419	5,50,699	4·34	5,04,985	1,24,611	−78,897	185	58·70
1901	1,29,54,075	14,05,248	6,42,940	4·96	5,08,291	1,46,144	−11,495	194	54·25
1902	1,31,11,415	13,17,214	5,73,918	4·38	5,11,298	1,53,667	−91,047	182	56·43
1903	1,31,88,948	15,08,506	5,07,425	3·85	5,15,051	1,21,830	−1,29,456	209	66·36
1904	1,31,50,812	15,59,688	5,39,679	4·10	5,15,679	1,30,367	−1,06,367	216	65·40
1905 (up to June)	1,31,77,027	6,66,363	1,58,575	1·20	4,475	38,525	+1,15,575	181	76·20

Brahmaputra-Sultanpur (3′ 3⅜″ gauge) branch.

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1897	2,02,919	...	...	...	...	...	...	...	...	Net earnings during 1899 and 1900 were paid over to the Company and interests up to 1900 were charged to capital.
1898	12,55,457	...	...	...	...	...	...	...	...	
1899	19,58,137	36,300	...	...	...	...	...	38	45·00	
1900	24,20,811	1,36,587	...	...	...	...	...	58	45·00	
1901	28,27,619	1,96,848	61,375	2·17	42,414	...	+18,961	64	45·00	
1902	29,17,993	2,40,424	1,32,233	4·53	86,750	9,480	+36,003	78	45·00	
1903	29,42,486	2,54,379	1,89,908	4·75	88,185	22,742	+28,981	82	45·00	
1904	...	Amalgamated with the Eastern Bengal (State) railway.						...	...	

Ranaghat-Krishnagar (2′ 6″ gauge) branch.

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	7,22,369	...	...	...	...	...	...	...	...
1899	7,27,809	46,348	8,415	1·16	12,352	20,767	2·85	59	81·24
1900	7,51,809	69,802	19,442	2·59	9,472	28,914	3 85	66	71·95
								66	78·03
1901	7,51,157	69,117	15,185	2·02	1,465	16,650	2·22	72	71·97
1902	7,51,158	76,180	21,353	2·84	15,960	37,313	4·97	82	60·86
1903	7,48,657	86,434	33,832	4·55	5,674	39,506	5·31	...	...
1904 1st half	...	40,861	12,160	...	2,876	15,036	...	...	...
1904 2nd half	...	...	Amalgamated with the Eastern Bengal (State) railway.						

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM—*contd.***

3 (*c*) Mymensingh-Jamalpur-Jagannathganj Branch railway (3′ 3⅜″ gauge)—

This line, which terminates on the Brahmaputra river, is connected with the Eastern section of the Eastern Bengal (State) Railway at Goalundo by the India General Steam and River Steam Navigation Companies' steamer services.

Details of construction—

This railway is 50·69 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on sâl sleepers.

Ballast.—The line is ballasted throughout with brick.

Fencing.—The line is fenced only at stations and through the town of Mymensingh.

Curves.—The sharpest curve is of 2,864 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Terms of contracts—

The Mymensingh-Jamalpur-Jagannathganj Branch railway is worked under the following contracts :—

Contracts of—6th January 1897 (between the Secretary of State and the India General Steam Navigation Company) for the construction and working of the Mymensingh-Jamalpur-Jagannathganj Branch railway.

3rd October 1899 (between the India General Steam Navigation Company, the India General Navigation and Railway Company and the Secretary of State) for the transfer of the domicile of the Mymensingh-Jamalpur-Jagannathganj Branch railway office from Calcutta to London.

The general conditions of the contracts are as follows :—

Government aid.—Government in respect of each year allow to the Mymensingh-Jamalpur-Jagannathganj Branch Railway Company, by way of rebate on the share attributable to the Eastern Bengal (State) railway of the receipts from traffic interchanged between the two railways, such a sum not exceeding in any year the net earnings from traffic except railway stores interchanged between the Eastern Bengal (State) railway system and this railway, as will, together with the net earnings of the Company for the year, make up an amount equal to interest for the year at a rate of 3½ per cent. per annum on the actual capital expenditure. Land has been provided free of charge.

Currency of contracts.—Government may determine the contracts on 12 months' notice either on the 31st December 1919, or at the end of any subsequent period of 10 years or on the 31st December 1948, the Government paying, if contracts are determined on the 31st December 1919, or at the expiration of any subsequent period of 10 years, a sum equal to 25 times the average yearly net earnings, not including rebate payments, during the three years prior to determination, but not exceeding by more than 20 per cent., or not being less than, the total capital expenditure ; and if determined on the 31st December 1948 (50 years), the total amount of such capital expenditure.

Power of Company to surrender contracts.—Nil.

Terms of working.—After deduction of 45 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), in which is included all such legal expenses of the Company as are properly debitable to revenue, the balance is payable to the Company.

Rates and fares.—To be arranged between Government and the working agency within the maxima and minima rates in force on the Eastern Bengal (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from E. B. S. Ry.	Total income.	Percentage on capital outlay.	Table II. Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1896	1,950	...	...	...	...	...	...	...	...
1897	5,54,688	...	...	...	...	...	...	...	...
1898	10,44,638	7,660	4,213	0·40	...	4,213	0·40	27	45·00
1899	16,17,248	66,499	36,575	2·27	...	36,575	2·72	33	45·00
1900	18,78,395	1,62,023	89,116	4·74	...	89,116	4·74	58	45·00
1901	20,84,346	1,67,736	92,265	4·43	...	92,265	4·43	60	45·00
1902	22,35,677	2,05,251	1,12,888	4·94	...	1,12,888	4·94	74	45·00
1903	22,01,173	2,22,825	1,24,993	5·68	...	1,24,993	5·68	82	43·90
1904	23,51,113	2,21,168	1,24,312	5·29	...	1,24 312	5·29	81	43·79
1905	23,36,029	2,16,642	1,18,748	4·98	...	1,18,748	5·25	81	45·19

3 (*d*) Cooch Behar railway (2′ 6″ gauge)—

Details of construction—

This railway is 33·60 miles long, consisting of main line, 22·15 miles, and branch, 11·45 miles known as the Native State section of the Cooch Behar-Santrabari extension. Its construction was sanctioned in 1891 and it was opened throughout in 1900.

Permanent-way.—The line is laid for 19·55 miles with 25-lb. and for 1·83 miles with 41½-lb. steel rails on sâl and pyinkado sleepers, and for 12·22 miles with 40-lb. iron rails on sâl sleepers. All rails are flat-footed.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 3}}{\text{Sub-heads (a) to (d)}}$. **EASTERN BENGAL (STATE) RAILWAY SYSTEM—*concld.***

3 (*d*) Cooch Behar railway (2′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Ballast.—The line is laid without ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 2,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Cooch Behar railway is worked under the following agreement:—

Agreement—of 15th June 1903 and having effect from the 1st January 1901 (between the Secretary of State and His Highness the Maharaja of Cooch Behar) for working.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Cooch Behar State.

Currency of agreement.—The Eastern Bengal (State) railway to maintain and work the Cooch Behar State railway for a period of five years from 1st January 1901.

Terms of working.—The Eastern Bengal (State) railway to receive 40 per cent. of the gross earnings for maintenance and working; provided that when the stock of the Eastern Bengal (State) railway is used for the conveyance of any traffic on the Cooch Behar railway, the Eastern Bengal (State) railway will receive and retain up to, but not exceeding, 45 per cent. of the gross earnings obtained from the use of such stock. The percentage of working charges will cover the cost of 'New Minor Works' up to the limit of Rs. 30 per mile per annum.

Rates and fares.—The Eastern Bengal (State) railway administration have full control over rates and fares.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	14,685	...	...	...	...	...
1892	4,09,186	...	...	...	...	...
1893	6,65,172	5,846	—2,455	...	13	188·94
1894	7,14,318	40,280	8,576	1·20	35	78·71
1895	7,30,953	53,174	19,200	2·63	46	63·89
1896	7,66,734	70,128	38,570	5·03	61	45·00
1897	9,01,219	64,262	35,344	3·92	51	45·00
1898	10,32,938	66,124	6,687	0·65	57	45·00
1899	12,99,031	82,773	43,073	3·32	53	47·95
1900	12,83,906	94,792	51,602	4·02	50	43·41
1901	13,94,923	1,27,596	74,667	5·35	72	41·48
1902	13,95,766	1,24,741	74,452	5·33	71	40·31
1903	14,91,329	1,42,340	83,834	5·62	82	41·19
1904	14,71,331	1,47,575	86,996	5·91	84	41·05
1905	14,82,893	1,45,488	87,313	5·88	85	41·20

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM—**

Lines comprising the system.—The East Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) East Indian railway (5′ 6″ gauge)	1,972·30	340·90	2,313·20
(*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)	162·36	...	162·36
(*c*) South Behar railway (5′ 6″ gauge)	78·76	...	78·76
(*d*) Tarkessur railway (5′ 6″ gauge)	22·23	...	22·23
Total	2,235·65	340·90	2,576·55

Running powers—

Home line over Foreign lines:—

	Miles.
Agra East Bank to Agra Fort, Rajputana-Malwa railway } for goods trains only	1·00
Naihati to Brace Bridge Junction and Chitpore, Eastern Bengal (State) railway } for goods trains only	34·50
Moghal Sarai to Benares Cantonment, Oudh and Rohilkhand (State) railway, for passenger trains only	10·00
Total	45·50

Foreign lines over Home line:—

	Miles.
Bengal-Nagpur railway at Katni } for passenger and goods trains	0·30
" " " at Asansol } for passenger and goods trains	0·50
" " " at Howrah } for passenger and goods trains	1·00
Great Indian Peninsula railway, Agra to Tundla } for passenger trains only	12·75
" " " at Cawnpore { for passenger trains only	0·97
" " " at Cawnpore { for goods trains only	0·52
" " " at Manikpur } for passenger and goods trains	0·63
" " " at Katni } for passenger and goods trains	0·38
North Western and Oudh and Rohilkhand (State) railways, Ghaziabad to Delhi } for passenger and goods trains.	13·00
Total	30·05

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads } (a) \text{ to } (d)}$ **EAST INDIAN RAILWAY SYSTEM**—*contd.*

4. (*a*) East Indian railway proper (5′ 6″ gauge)—

Details of construction—

The open mileage of the East Indian railway proper is 1,972·30 miles. This may be divided into (1) main line (Howrah to Delhi), 955·08 miles; (2) Loop line (Khana junction to Kiul), 250·39 miles; and (3) branches, 766·83 miles. Of the above 499·10 miles are double and 2·20 miles triple line.

There are in addition 340·90 miles single and 13·60 miles double line under construction. The first sanction to constructing the main line was given in 1851 and it was opened throughout in 1871. The Loop line was opened in 1862.

Permanent-way.—The main line from Howrah to Delhi, also the Loop line from Khana junction to Kiul, the Jubbulpore branch, Jharia branch, Ondal loop, Ikrah branch, Giridih branch, Patna-Gya branch, Moghal Sarai-Gya chord, Barun-Daltonganj branch, Agra branch and Shikohabad-Farukhabad branch are laid with steel rails throughout. A few short branches are still laid with iron rails: but these are being replaced with second-hand steel rails removed from the main line in the course of relaying operations.

On both up and down roads of the main line from Howrah to Kiul, a distance of 261 miles, the rails are bull-headed, weighing 85 lbs. per yard. The 85-lb. bull-headed rail has also been laid on the single line between Moghal Sarai and Mirzapur. The rest of the main line and branches, with the exception of the Patna-Gya and Barun-Daltonganj branches, are laid with double-headed rails, weighing 75 lbs. per yard.

As at present laid, about fifty per cent. of the sleepers are wood and the remainder are iron. The wooden sleepers principally consist of sal and deodar; but, owing to the difficulty in getting sal and deodar sleepers and to the rise in price of same, Australian hard woods are now being tried. The chairs are cast iron and vary in weight from 36 to 51½ lbs. The iron sleepers are of the Denham Olpherts' pattern and weigh about 252 lbs. each.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout except the Jharia, Damuda, Ikrah, Salanpur, Chanch, Pandra, Azimganj, Barun-Daltonganj, Moghal Sarai-Gya and Shikohabad-Farukhabad branches and the Ondal loop and Dhanbaid-Jharia Chord.

Curves.—The sharpest curve is of 1,525 feet radius.

Gradients.—The ruling gradient of the main line is 1 in 300 except between Raneegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha. The ruling gradient of the Loop line and the Jubbulpore branch is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—22nd December 1879.—East Indian Railway Company's principal contract.

10th November 1893.—Contract for the incorporation of the following State branches in the undertaking:—Ghazipur (Dildarnagar to Tarighat); Bhadreswar (Bhadreswar junction to the right bank of the Hooghly); Mokameh (Mokameh junction to the Ganges); Digha Ghat (Bankipore junction to the right bank of the Ganges at Digha Ghat); Jharia (Barakar to the Jharia coal-fields); Toposi colliery (Toposi to Khairabad, Nundi to Panuria and Salanpur to Shamdi); Gya (Bankipore to Gya); and Azimganj (Nalhati to Azimganj).

26th February 1896.—As to debenture capital.

22nd November 1897.—Contract for the construction and working of the Moghal Sarai-Gya railway.

14th November 1899.—Contract modifying that of 1879.

The general conditions of the contracts are as follows:—

Government aid.—Government guarantee interest at 4 per cent. in sterling on £6,550,000 (being capital representing the deferred portion, *i.e.*, one-fifth of the annuity payable under the terms of purchase). All capital is provided either by Government or by the Company by the issue of debentures or debenture stock, in such manner or on such terms as to interest or otherwise as the Secretary of State determines.

Terms of contracts.—The lines were purchased from the East Indian Guaranteed Railway Company by the State on the 1st January 1880, and all the contracts then subsisting between the Secretary of State and that Company (except those relating to debentures or debenture stock) were determined. The purchase price was £32,750,000,* and it was provided by the Purchase Act that this should be paid in the form of a terminable annuity of the amount of £1,473,750, payable from the 1st January 1880 to the 14th February 1953. One-fifth of the annuity was deferred, and the holders of this portion (representing a capital sum of £6,550,000), constitute the present East Indian Railway Company, which, since the purchase, has worked the railway for the Government under the contract of 1879 as modified by the contract of 1899. The deferred annuity holders receive, in lieu of the annuity, interest at 4 per cent. per annum on £6,550,000 and a share of the surplus profits of the railway. On the determination of the contract, the portion of the annuity that has been deferred will become payable for the period remaining up to the 14th February 1953.

* Company's stock at date of purchase ... £26,200,000
Premium of 26 per cent. 6,550,000
32,750,000

Currency of contracts.—The contract of 1879 terminates on the 31st December 1929, but either party may determine the contract at the end of the 20th or at the end of any succeeding 5th year (computed from the 1st of January 1880) on giving two clear years' notice in writing to the other party of this intention.

NOTE.—Government relinquished their right to determine the contract at the end of the 20th year, and by mutual agreement the principal contract will not be determined before the 31st December 1919.

Power of Company to surrender contract.—See currency of contracts.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

4. (*a*) East Indian railway proper (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

surplus profits (after payment of interest on debentures, annuity, interest on deferred portion of annuity, interest due to Government on capital advances, etc., and contribution to the Provident Fund) up to a sum of 25 lakhs of rupees are divided in proportion of four-fifths to Government and one-fifth to the Company. Any excess over 25 lakhs of rupees is divided in proportion of fourteen-fifteenths to Government and one-fifteenth to the Company.

Rates and fares.—Certain maxima and minima rates and fares have been fixed within which the Company is permitted to vary rates.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Annuity.	Company's share of net earnings.	Gain or loss to the State.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	34,32,77,360	4,35,46,730	2,86,14,479	8·34	1,65,74,363	...	61,25,877	+ 59,14,239	
1880	34,35,77,327	4,35,04,947	2,86,72,035	8·35	*1,98,06,263	...	17,72,690	+ 70,93,082	* Interest in 1880 includes annuity charges, which cannot be separated.
1881	34,87,63,677	4,54,11,472	3,08,35,036	8·84	31,05,426	1,73,92,000	20,68,867	+ 82,73,743	
1882	35,07,21,455	4,71,17,594	2,96,57,086	8·46	32,81,764	1,73,92,000	17,88,073	+ 71,95,249	
1883	35,24,91,304	4,94,67,085	3,11,50,980	8·84	38,16,170	1,72,57,772	19,99,731	+ 80,77,307	
1884	35,57,38,760	4,38,38,714	2,73,22,003	7·68	35,58,035	1,78,50,459	11,72,323	+ 47,41,188	
1885	35,85,96,619	4,63,86,889	3,30,16,960	9·21	38,13,262	1,79,75,714	16,29,502	+ 95,98,482	
1886	36,06,85,918	4,66,70,853	3,05,13,359	8·46	39,91,104	1,89,50,187	14,97,276	+ 60,74,842	
1887	36,12,14,681	4,60,65,661	3,13,34,263	8·67	40,70,944	1,92,13,333	15,87,252	+ 64,62,734	
1888	36,09,27,530	4,54,36,902	3,03,35,075	8·40	40,73,297	2,03,43,530	11,64,693	+ 47,53,555	
1889	36,19,22,800	4,49,57,901	2,94,95,230	8·12	41,34,108	2,09,60,000	8,31,347	+ 34,28,775	
1890	36,21,32,758	4,40,57,665	2,98,36,815	8·24	41,83,278	2,03,43,530	10,37,019	+ 42,62,988	
1891	36,15,18,827	4,56,87,001	3,60,37,028	9·97	43,93,426	1,86,94,054	26,45,392	+ 1,03,04,156	
1892	36,24,97,506	4,91,41,600	3,48,16,719	9·60	37,25,754	2,06,47,164	20,88,760	+ 83,55,041	
1893	36,91,20,357	5,08,44,654	3,60,94,293	9·78	41,26,889	2,34,46,780	17,04,125	+ 68,16,499	
1894	37,24,36,356	5,26,89,485	3,64,26,405	9·78	43,37,988	2,43,89,592	15,39,767	+ 61,59,068	
1895	37,82,18,020	5,41,50,856	3,78,34,726	10·00	45,73,681	2,61,01,122	14,29,078	+ 57,30,845	
1896	38,27,66,003	5,40,69,142	3,67,77,682	9·61	46,90,562	2,58,59,455	12,45,733	+ 49,81,932	
1897	39,39,91,173	5,88,28,013	4,14,93,469	10·53	48,20,238	2,47,34,406	23,87,763	+ 95,51,062	
1898	40,71,94,336	5,97,96,060	4,08,07,269	10·02	50,46,514	2,32,64,533	24,99,244	+ 99,96,978	
1899	42,70,40,208	6,35,45,974	4,26,60,018	9·99	54,64,902	2,21,45,516	30,09,920	+ 1,20,39,680	
1900	44,28,43,540	6,84,74,972	4,47,15,571	10·10	60,18,054	2,15,60,963	18,09,104	+ 1,53,27,450	
1901	45,66,59,069	7,03,96,636	4,57,13,311	10·01	65,46,878	2,16,82,360	18,51,450	+ 1,56,32,623	
1902	47,06,40,852	6,77,38,713	4,29,80,833	9·13	70,34,492	2,16,46,868	16,19,965	+ 1,26,79,508	
1903	48,79,61,454	6,99,72,699	4,63,98,422	9·52	74,46,371	2,16,15,000	16,82,231	+ 1,56,54,820	
1904	50,26,09,029	7,59,71,544	5,05,64,422	10·06	80,23,978	2,16,15,000	20,64,276	+ 1,88,61,168	
1905	52,58,72,727	7,50,47,139	4,81,85,134	9·16	86,75,860	2,16,15,000	18,62,075	+ 1,60,32,199	

TABLE II.

Calendar year.	East Indian (5′ 6″ gauge).		Nalhati (4′ 0″ gauge).		Calendar year.	East Indian (5′ 6″ gauge).		Patna-Gya (5′ 6″ gauge).		Nalhati (4′ 0″ gauge).		Dildarnagar-Ghazipur (5′ 6″ gauge).	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.		Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.			Rs.		Rs.		Rs.		Rs.	
1853	...	...	...	...	1878	507	35·69	...	...	64	79·41	...	...
1854	131	62·18	...	...	1879	552	32·86	121	55·84	65	67·56	...	...
1855	108	51·97	...	...	1880	549	33·04	162	56·13	49	105·33	56	128·33
1856	167	40·62	...	...	1881	578	31·85	173	65·11	47	79·20	63	99·52
1857	232	38·12	...	...	1882	601	36·94	184	60·51	51	73·05	73	85·24
1858	279	46·49	...	...	1883	630	36·95	158	51·93	57	69·63	80	49·87
1859	253	44·77	...	...	1884	558	37·61	174	57·48	55	90·84	75	58·37
1860	231	48·36	...	...	1885	589	35·25	174	52·52	54	82·08	75	52·28
1861	240	46·49	...	...	1886	591	34·59	180	52·01	59	85·29	76	52·05
1862	192	53·81	...	...	1887	583	31·70	178	46·53	65	70·57	77	46·45
1863	222	55·01	...	...	1888	567	33·24	168	47·97	74	78·39	74	91·13
1864	253	50·79	36	48·88	1889	557	34·59	175	48·70	73	78·18	...	...
1865	311	44·82	41	63·28	1890	538	31·35	174	45·80	71	78·01	...	...
1866	374	44·24	36	105·15	1891	615	27·21	204	42·76	66	62·97	...	...
1867	369	48·91	45	68·81	1892	587	28·47	193	42·94	Converted to 5′ 6″ gauge.		...	...
1868	346	44·88	57	83·60									
1869	399	44·42	60	59·64	1893	534	27·44	...	...	...	...	...	...
1870	424	43·68	60	48·77	1894	604	30·87	...	...	...	...	...	...
1871	388	43·36	55	58·07	1895	603	31·07	...	...	...	...	...	...
1872	368	41·44	53	57·14	1896	597	31·98	...	...	...	...	...	...
					1897	649	29·47	...	...	...	...	...	...
1873	382	38·75	60	60·06	1898	658	31·76	...	...	...	...	...	...
1874	474	35·70	61	67·22	1899	697	32·84	...	...	...	...	...	...
1875	374	39·58	57	76·42	1900	708	34·78	...	...	...	...	...	...
1876	452	35·08	54	111·15	1901	733	35·06	...	...	...	...	...	...
1877	565	31·85	64	100·47	1902	687	36·55	...	...	...	...	...	...
					1903	692	33·64	...	...	...	...	...	...
					1904	749	33·39	...	...	...	...	...	...
					1905	738	35·74	...	...	...	...	...	...

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM—*contd.***

4. (*b*) Delhi-Umballa-Kalka railway (5′ 6″ gauge)—

Details of construction—

This railway is 162·36 miles long. It was opened throughout in 1891.

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on Denham Olpherts' cast-iron plate and wooden sleepers with cast iron chairs.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 1,010 feet radius.

Gradients.—The ruling gradient is 1 in 200 except for 15 miles from Kalka where it is 1 in 40.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—24th January 1889 (between the Secretary of State and the East Indian Railway Company) for working.

12th February 1889 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction.

19th March 1890 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for raising of additional capital by the issue of debentures.

19th December 1895 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) conceding to the Company from the 1st January 1893 the 2 per cent. of gross earnings previously retained by Government.

24th July 1896 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for the provision of funds for capital works.

9th June 1897 (between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) guaranteeing interest at the rate of 3¼ per cent. on share capital.

The general conditions of the contracts are as follows:—

Government aid.—By the contract of 9th June 1897, Government supplement the net earnings of the Company for the year 1896 and each succeeding year by such an annual subsidy as will enable the Company, after payment of debenture interest, to pay a dividend of 3¼ per cent. per annum on their share capital. Land was also provided free of cost.

Currency of contracts.—The contracts may be determined by effluxion of time on the 31st December 1916, unless some arrangement is effected for continuing the working. Should such arrangement be made, Government may determine the contracts on the 31st December 1926 or on the 31st December of any subsequent tenth year. On determination, Government are to receive possession of the railway, and to pay the Company a sum equal to 25 times the average yearly profits of the Company during the preceding five years. Subsidy payments by Government are to be excluded from the profits of the Company in calculating the price to be paid on purchase by Government.

Power of Company to surrender contracts.—Nil.

Terms of working.—Government undertake (through the agency in the first instance of the East Indian Railway Company) to supply the necessary rolling-stock and to work and maintain the line until the 31st December 1916, taking 48 per cent. of the gross receipts of the railway for the working agency (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) and paying over 52 per cent. to the Company. Surplus profits in excess of 3¼ per cent. per annum are divided equally between Government and the Company until Government have been repaid advances of subsidy, with interest. Thereafter, all surplus profits belong to the Company.

Rates and fares.—To be agreed upon from time to time between the Secretary of State and the working agency; but in the case of that portion of the line between Delhi and Umballa to be not more than the maximum, nor less than the minimum rates and fares in force on the East Indian railway, and in the case of that portion between Umballa and Kalka to be not more than three times such maximum nor less than such minimum.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1889	58,90,335	...	...	...	...	...	...	...	...
1890	1,35,55,580	...	...	...	...	...	...	...	...
1891	1,55,44,692	9,07,697	4,72,002	3·04	...	4,72,002	3·04	128	48·00
1892	1,58,22,137	10,81,769	5,62,520	3·56	...	5,62,520	3·56	129	48·00
1893	1,55,24,600	11,98,508	6,23,224	4·01	...	6,23,224	4·01	143	48·00
1894	1,55,25,547	13,37,526	6,95,514	4·48	...	6,95,514	4·48	159	48·00
1895	1,55,06,120	14,60,519	7,59,470	4·90	...	7,59,470	4·90	174	48·00
1896	1,54,49,783	13,18,840	6,85,797	4·44	...	6,85,797	4·44	153	48·00
1897	1,53,26,585	15,73,319	8,18,126	5·34	...	8,18,126	5·34	186	48·00
1898	1,53,43,587	16,07,512	8,35,906	5·45	...	8,35,906	5·45	191	48·00
1899	1,53,01,272	14,49,378	7,29,541	4·77	...	7,29,541	4·77	172	48·00
1900	1,53,15,467	13,72,523	7,13,712	4·66	...	7,13,712	4·66	163	48·00
1901	1,52,92,648	18,05,858	9,39,046	6·14	...	9,39,046	6·14	213	48·00
1902	1,54,23,791	18,66,695	9,70,681	6·29	...	9,70,681	6·28	221	48·00
1903	1,55,49,998	18,30,960	9,52,099	6·12	...	9,52,099	6·12	216	48·00
1904	1,55,51,763	18,53,475	9,63,807	6·19	...	9,63,807	6·19	218	48·00
1905	1,56,07,499	20,16,936	10,48,807	6·72	...	10,48,807	6·70	238	48·00

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 4}}{\text{Sub-heads (a) to (d)}}$. **EAST INDIAN RAILWAY SYSTEM**—*contd.*

4. (*c*) South Behar railway (5′ 6″ gauge)—

Details of construction—

This railway is 78·76 miles long. It connects Luckeeserai with Gya and was opened in 1899.

Permanent-way.—The permanent-way consists of double-headed steel rails, 75 lbs. to the yard, laid on wooden sleepers and cast-iron chairs, and Denham Olpherts' cast-iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced near villages, at stations and for a short distance on each side of level crossings only.

Curves.—The sharpest curve is of 3,000 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—7th August 1895 (between the Secretary of State and the South Behar Railway Company) for construction.

22nd August 1895 (between the Secretary of State and the East Indian Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Government, in respect of each half-year, allow to the South Behar Railway Company, by way of rebate on the share attributable to the East Indian railway of the receipts from traffic interchanged between the two railways, a sum not exceeding 30 per cent. of such share as will, together with the net earnings of the South Behar Railway Company, make up an amount equal to interest for the half-year at the rate of 4 per cent. per annum on the actual capital expenditure on the South Behar railway. For the purpose of calculating this rebate, the capital expenditure is to be regarded as not exceeding Rs. 120 lakhs, and the amount towards making up of which the rebate is to be allowed is to be limited to Rs. 2,40,000 in any half-year. Land was also provided free of cost.

Currency of contracts.—Government have power to determine the contracts on the 30th June 1919, or at the end of any subsequent period of 10 years from that date, by giving twelve months' notice. In case of such determination, the Government will pay to the Company in England an amount equal to the total paid up capital in sterling, so far as such capital has been expended on the undertaking with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—For the first two years after the opening of any section, the cost of maintenance was charged against capital, Government retaining only 35 per cent. of the gross earnings for providing rolling-stock and working the line, the remaining 65 per cent. going to the Company. Thereafter, Government retain 45 per cent. of the gross earnings (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work' and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) to meet the cost of maintaining, stocking and working the line, the Company taking the remaining 55 per cent.

Rates and fares.—To be agreed upon from time to time between the Government and the working agency within the maxima and minima rates and fares in force on the East Indian railway.

Statistics of working—

Calendar year	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from E. I. Ry.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1895	5,17,988	...	...	...	...	...	...	...	...
1896	30,88,036	...	...	...	...	...	...	...	...
1897	62,72,845	...	...	...	...	...	...	...	...
1898	97,45,791	...	...	...	...	...	...	...	...
1899	1,18,16,730	2,03,328	1,32,163	1·12	33,403	1,65,566	1·40	101	35·00
1900	1,23,15,110	4,67,133	3,03,636	2·47	1,44,404	4,48,040	3·64	114	35·00
1901	1,23,66,533	5,14,370	3,03,822	2·50	1,28,082	4,36,904	3·53	125	40·02
1902	1,19,88,612	4,99,809	2,74,895	2·29	1,35,445	4,10,340	3·42	122	45·00
1903	1,20,01,897	5,24,605	2,88,533	2·40	1,57,708	4,46,241	3·72	128	45·00
1904	1,19,72,914	5,70,358	3,13,697	2·62	1,65,382	4,79,079	4·00	138	45·00
1905	1,19,77,154	5,55,199	3,05,260	2·55	1,72,721	4,78,061	3·99	135	45·00

4. (*d*) Tarkessur railway (5′ 6″ gauge)—

Details of construction—

This railway, which connects Seoraphuli, a station on the East Indian railway, with Tarkessur, is 22·23 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent-way.—The permanent-way consists of 74-lb. iron rails laid on Denham Olpherts' cast-iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 2,700 feet radius.

Gradients.—The ruling gradient is 1 in 500.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 4}{\text{Sub-heads } (a) \text{ to } (d)}$. **EAST INDIAN RAILWAY SYSTEM—*concld.***

4 (*d*) Tarkessur railway (5′ 6″ gauge)—*concld.*

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—8th September 1883 (between the Secretary of State and the Tarkessur Railway Company) for construction.

15th September 1887 (between the Secretary of State and the East Indian Railway Company) for working.

1st March 1888 (between the Secretary of State and the Tarkessur Railway Company) for working.

The general conditions of the contracts are as follows:—

Government aid.—Land was provided free of cost.

Currency of contracts.—The contract of 1883 terminates on the 7th September 1982, but the Secretary of State, by giving twelve months' previous notice, has the power to determine the contract after the railway has been opened for thirty years, and thereafter at intervals of ten years. In the event of such determination, Government will pay the Company a sum equal to the aggregate net profits during the twenty years preceding.

Power of Company to surrender contracts.—Nil.

Terms of working.—From the gross earnings are deducted working expenses (which may include capital expenditure classed as 'Minor Works' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) calculated at the same percentage of the gross earnings as obtains on the East Indian railway system as a whole; 5 per cent. of the gross earnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance is divided in proportion of four-fifths to the Tarkessur Railway Company and one-fifth to the East Indian Railway Company.

Rates and fares.—Certain maxima have been fixed, and the Company is authorized to charge within those maxima such rates and fares as may from time to time be mutually agreed upon.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1885	16,88,995	2,62,313	1,24,424	7·37	227	52·57
1886	17,24,717	2,49,903	1,19,136	6·91	215	52·15
1887	17,23,410	2,63,792	1,32,274	7·65	228	49·86
1888	17,34,822	2,79,717	1,36,780	7·88	242	51·10
1889	17,23,138	2,84,895	1,36,578	7·90	246	55·51
1890	17,23,778	2,86,526	1,44,283	8·35	248	49·64
1891	17,29,021	3,05,132	1,63,478	9·45	264	46·42
1892	17,32,567	2,93,674	1,54,837	8·94	254	47·28
1893	17,47,289	2,89,051	1,50,420	8·61	245	48·36
1894	17,47,840	3,06,159	1,56,469	8·95	265	48·96
1895	17,53,340	3,08,156	1,59,091	9·07	267	48·37
1896	17,56,898	3,13,243	1,57,003	8·95	271	49·88
1897	17,57,160	3,12,656	1,62,563	9·25	270	48·01
1898	17,77,085	3,14,056	1,58,461	8·92	272	49·54
1899	17,84,166	3,06,759	1,52,491	8·55	267	50·58
1900	17,84,166	3,32,965	1,61,132	9·03	288	51·61
1901	17,92,293	3,30,390	1,57,823	8·81	285	52·23
1902	17,91,612	3,28,510	1,53,348	8·56	283	53·32
1903	17,93,965	3,33,924	1,62,741	9·13	288	50·96
1904	17,97,555	3,30,635	1,63,006	9·07	284	50·70
1905	17,98,615	3,26,715	1,55,221	8·63	282	52·49

Number $\frac{\text{Main head } 5}{\text{Sub-heads } (a) \text{ to } (h)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—**

Lines comprising the system.—The Great Indian Peninsula railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Great Indian Peninsula railway . (5′ 6″ gauge)	1,561·63	45·42	1,607·05
(*b*) Agra-Delhi Chord railway . (5′ 6″ gauge)	119·75	6·06	125·81
(*c*) Bhopal-Itarsi railway . (5′ 6″ gauge)	57·39	...	57·39
(*d*) Bhopal-Ujjain railway . (5′ 6″ gauge)	113·27	...	113·27
(*e*) Bina-Goona-Baran railway . (5′ 6″ gauge)	145·63	...	145·63
(*f*) Indian Midland railway . (5′ 6″ gauge)	307·90	2·24	310·14
(*g*) Gwalior Light railway . (2′ 0″ gauge)	183·53	66·66	250·19
(*h*) *Motheran Light railway* . (2′ 0″ gauge)	...	12·79	12·79
Total .	2,989·10	133·17	3,122·27

Running powers—

Home line over foreign lines:—

Dadar junction to Colaba, Bombay, Baroda and Central India railway, for goods trains only	7·25
At Agra, Rajputana-Malwa railway, for passenger and goods trains	2·89
At Cawnpore, East Indian railway, 0·97 mile, for passenger trains and 0·52 mile for goods trains	1·49
At Manikpore, East Indian railway, for passenger and goods trains	0·63
At Katni, East Indian railway, for goods trains only	0·35
At Katni, Bengal-Nagpur railway, for passenger trains only	1·60
At Ujjain, Bombay, Baroda and Central India railway, for passenger and goods trains	0·24
At Cawnpore, Oudh and Rohilkhand (State) railway, for passenger trains only	0·86
From Cawnpore to Lucknow, Oudh and Rohilkhand (State) railway, for passenger and goods trains	44·63
Total	59·97

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 5}{\text{Sub-heads } (a) \text{ to } (h)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

Running powers—*concld.*

Foreign lines over home line :—

	Miles.
Bombay, Baroda and Central India railway, Dadar Junction to Carnac bridge, for goods trains only	4·39
Bengal-Nagpur railway at Nagpur for Passenger and goods trains	0·65
Total	5·04

5 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—

This line was purchased by the State in 1900, but the working was left in the hands of the Company under the terms of a new Contract, dated the 21st December 1900.

Details of construction—

The open mileage of the Great Indian Peninsula railway proper is 1,561·63 miles. This may be divided into (*1*) *North-East line,* main line (Bombay to Jubbulpore), 615·10 miles; branches, 384·99 miles: (*2*) *South-East line,* main line (Kalyan to Raichur), 408·86 miles; branches, 152·68 miles. Of the above 567·48 miles are double and 4·92 miles quadruple line.

There are under construction 45·42 miles of single line.

First sanction to the construction of the North-East line was given in 1850 and it was opened throughout in 1870. The South-East line was sanctioned in 1854 and it was opened throughout in 1871.

Permanent-way.—The main line is laid with 86-lb. double-headed, 82-lb. bull-headed and 69-lb. double-headed steel rails. The sleepers originally laid were chiefly wooden; these have now to a large extent been replaced by iron pots. The whole of the South-East line, except the ghat sections, is laid with iron pots.

Ballast.—The line is fully ballasted throughout with sand gravel or broken stone.

Fencing.—With the exception of the Mohpani, Chalisgaon-Dhulia, and Jalgaon-Amalner branches the line is fully fenced.

Curves.—The sharpest curve has a radius of 990 feet.

Gradients.—The ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasind and Asvali; the ruling gradient on the ghat sections is 1 in 37.

Terms of contract—

The railway is worked under the following contract :—

Contract of—21st December 1900 for working the Great Indian Peninsula railway and Indian Midland railway systems as one undertaking.

The general conditions of the contract are as follows :—

Government aid.—Government to pay interest at 3 per cent. per annum on the amount for the time being paid up, or credited as paid up, on the shares or stock in the new capital of the Great Indian Peninsula Railway Company, which is at present authorised at £2,575,000. All capital will be provided by the Secretary of State bearing interest at the rate of 3½ per cent. per annum, or at such other rate as may be agreed upon; or will be raised by the Company, by the issue of debentures or debenture stock at such rate of interest as the Secretary of State may determine. Land was provided free; but any land acquired after 30th June 1900 is paid for from the capital of the undertaking.

Terms of contract.—The line was purchased from the Great Indian Peninsula Guaranteed Railway Company by the State in 1900, and all the contracts then subsisting between the Secretary of State and that Company were determined. The purchase price was £40,781,568,* payable, up to the 17th August 1948, in the form of a terminable annuity of £1,268,516.

	£
* Company's stock at date of purchase	34,859,218
Debentures and debenture stock	5,922,350
Total	40,781,568

Currency of contract.—The contract is current for a period of 25 years from the 1st July 1900, when it will be determinable by the Secretary of State, paying the amounts paid or credited on all shares and stock and indemnifying the Company from all debts and liabilities incurred under sanction.

Power of Company to surrender contract—Nil.

Terms of working.—From the gross earnings of the undertaking, that is of the Great Indian Peninsula and Indian Midland railways, there will be deducted—

(*i*) The working expenses, which may include any single item of capital expenditure not exceeding Rs. 2,000 to be classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 25,000 in each half-year and a payment of Rs. 40 per mean mile worked to be made half-yearly to Government for supervision;

(*ii*) A sum of Rs. 1,00,00,000 which is payable to Government;

(*iii*) Repayment of all interest payable on all moneys other than shares or capital stock raised for the purposes of the undertaking or provided by Government after the 30th June 1900.

If the receipts for any year ending on the 30th day of June exceed the payments as above detailed for the same period, $\frac{19}{20}$ths of the surplus are paid to the Secretary of State and $\frac{1}{20}$th to the Company; provided that if the Company increases its new capital and issues further shares or stock as fully paid up in exchange for stock of the Indian Midland Railway Company, the Company's share in such surplus shall be increased by an additional fractional share bearing the same proportion to the original fractional share of $\frac{1}{20}$th as the additional capital of the Company so exchanged bears to the new authorised capital of £2,575,000, but the total fractional share of the Company is not to exceed a one-tenth share.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads } (a) \text{ to } (h)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

5 (*a*) **Great Indian Peninsula railway proper** (5′ 6″ gauge)—*contd.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per-centage on Capital outlay.	Guaran-teed interest.	Annuity.	Com-pany's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879	25,59,56,152	2,52,48,315	1,01,90,602	3·98	1,24,65,646	...	6,14,291	—28,89,335
1880	25,58,96,113	2,49,53,253	1,11,05,551	4·34	1,24,93,200	...	5,53,886	—19,41,485
1881	25,75,86,095	3,20,56,823	1,61,74,097	6·28	1,24,93,200	...	18,23,748	+18,57,149
1882	25,75,90,499	3,53,63,201	1,80,88,483	7·02	1,24,93,200	...	32,05,583	+23,89,400
1883	26,07,58,700	3,51,14,365	1,75,36,005	6·72	1,25,12,825	...	33,22,918	+17,00,262
1884	26,34,97,600	3,56,56,544	1,59,55,250	6·06	1,42,81,503	...	24,76,048	—8,02,301
1885	26,84,43,816	3,64,32,047	1,79,31,397	6·68	1,51,17,467	...	26,97,344	+1,16,586
1886	26,92,99,673	3,92,57,907	2,08,78,390	7·75	1,60,91,188	...	39,89,569	+7,97,683
1887	27,03,76,543	3,99,27,463	2,10,80,237	7·80	1,66,44,568	...	41,03,069	+3,32,601
1888	27,25,93,364	4,10,59,219	2,16,35,667	7·94	1,72,81,176	...	43,31,246	+23,245
1889	27,50,39,981	3,70,68,814	1,78,91,616	6·51	1,74,32,160	...	26,82,255	—22,22,799
1890	27,77,29,064	3,81,45,242	1,90,22,952	6·85	1,55,23,271	...	31,04,971	+3,94,710
1891	27,75,19,781	4,52,55,333	2,32,50,708	8·38	1,67,57,262	...	51,89,008	+13,04,438
1892	27,72,17,255	4,03,65,627	2,01,95,097	7·28	1,88,04,314	...	38,13,506	—24,22,723
1893	27,72,93,860	3,88,13,742	1,79,90,922	6·49	1,91,65,618	...	29,25,476	—41,00,172
1894	27,91,09,112	3,62,74,296	1,62,42,786	5·82	2,18,32,651	...	30,40,331	—86,30,196
1895	27,95,39,235	3,37,90,194	1,47,16,901	5·26	2,16,97,060	...	16,20,361	—86,00,520
1896	27,90,29,173	3,44,19,629	1,54,05,060	5·52	2,02,18,872	...	21,53,257	—69,67,069
1897	27,92,85,611	2,84,32,402	93,83,654	3·36	1,89,46,479	...	...	—95,62,825
1898	28,18,37,621	3,48,77,496	1,41,02,053	5·00	1,83,20,513	...	13,57,327	—55,75,787
1899	28,55,49,756	3,58,09,431	1,56,57,520	5·48	1,79,65,944	...	17,77,032	—40,85,456
1900 1st half	30,27,49,717	3,46,31,925	95,37,180	3·15	88,65,500	...	14,48,203	—8,76,573
1900 2nd half			96,30,083	2·19	24,34,267	94,68,889	...	—52,93,073
1901	30,38,67,135	4,16,57,453	2,16,48,151	7·12	48,96,908	1,90,87,970	2,72,210	—26,06,997
1902	30,57,71,091	4,23,13,668	2,10,73,893	6·89	49,41,692	1,90,56,785	2,92,872	—32,17,456
1903	31,08,53,055	4,68,61,554	2,38,12,514	7·66	50,66,786	1,90,28,730	3,26,878	—6,09,880
1904	32,00,72,108	4,82,41,344	2,41,79,728	7·55	53,09,707	1,90,28,730	2,91,543	—4,50,252
1905	32,65,20,022	5,22,33,877	2,70,20,162	8·31	57,59,480	1,90,28,730	4,63,709	+17,65,243

TABLE II.

Calendar year.	Earn-ings per mile per week.	Pro: of exp: to earn-ings.
	Rs.	
1853	119	45·90
1854	88	60·81
1855	89	70·21
1856	113	42·17
1857	158	45·27
1858	173	42·19
1859	172	51·19
1860	144	60·97
1861	139	76·35
1862	149	62·02
1863	175	67·55
1864	119	72·07
1865	414	59·54
1866	357	58·07
1867	368	55·69
1868	357	61·80
1869	348	67·79
1870	300	62·25
1871	307	63·03
1872	284	64·25
1873	284	64·09
1874	303	59·17
1875	324	47·28
1876	369	47·60
1877	492	48·30
1878	429	48·91
1879	383	59·64
1880	372	55·49
1881	426	49·40
1882	470	48·00
1883	466	49·67
1884	503	52·31
1885	467	50·46
1886	503	46·49
1887	511	46·84
1888	526	46·96
1889	494	51·42
1890	508	49·80
1891	584	48·25
1892	525	49·93
1893	501	53·57
1894	468	55·18
1895	436	56·38
1896	444	55·20
1897	367	66·96
1898	450	59·49
1899	462	55·76
1900	459	52·49
1901	518	48·03
1902	523	50·18
1903	575	49·18
1904	592	49·88
1905	641	48·27

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 5}{\text{Sub-heads } (a) \text{ to } (h)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

5 (*a*) Great Indian Peninsula railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—*concld.*

Calendar year.	WARDHA COAL BRANCH. Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.	DHOND-MANMAD BRANCH. Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1879	55,93,772	1,65,158	6,073	0·11	2,51,431	—2,45,361	69	81·64	98,90,308	4,67,557	—27,664	...	4,07,525	—4,35,189	62	105·92
1880	57,32,921	3,02,279	—1,31,730	...	2,57,032	—3,88,762	65	152·90	1,07,29,227	6,25,994	65,145	0·61	4,76,299	—4,11,154	91	87·31
1881	58,80,993	4,75,988	1,19,447	2·03	2,37,916	—1,18,469	197	101·35	99,49,346	6,33,882	1,22,588	1·23	3,93,438	—2,70,850	*	*
1882	60,94,186	5,95,622	98,257	1·61	2,38,834	—1,40,547	255	76·80	99,25,416	7,89,559	1,59,192	1·60	3,97,802	—2,38,610	*	*
1883	63,93,758	7,64,702	5,89,382	9·22	2,47,602	+3,41,780	126	59·80	1,00,64,757	8,22,833	1,92,139	1·91	4,02,585	—2,10,446	109	76·65
1884	66,20,641	6,81,037	2,11,860	3·20	2,61,176	—49,316	121	64·20	1,02,49,438	8,77,100	2,03,785	1·99	4,08,289	—2,04,496	116	76·77
1885	66,65,755	6,53,649	1,46,395	2·20	2,64,219	—1,17,824	108	80·66	1,02,63,278	9,07,422	2,20,623	2·15	4,10,544	—1,89,921	...	...
1886	71,98,093	7,28,205	1,35,936	1·89	2,78,228	—1,42,292	114	92·23	1,09,26,745	9,84,718	2,33,764	2·14	4,30,353	—1,96,589	...	...
1887	71,00,635	7,68,052	1,31,931	1·86	2,89,465	—1,57,484	125	80·76	1,09,46,935	9,60,890	2,27,338	2·08	4,37,893	—2,10,555	...	...
1888	70,91,230	8,71,430	1,98,020	2·79	2,84,523	—86,503	135	74·21	1,09,75,115	10,31,762	2,55,445	2·33	4,38,458	—1,83,013	...	...
1889	70,54,755	8,62,694	2,99,621	4·25	2,82,844	+16,777	142	57·24	1,09,88,830	10,03,616	2,49,427	2·27	4,39,319	—1,89,892	...	...
1890	70,06,181	9,33,326	2,75,001	3·93	2,81,296	—6,295	140	63·64	1,09,93,448	10,61,316	2,63,184	2·39	4,39,629	—1,76,495	...	...
1891	49,81,196	2,58,971	60,053	1·21	2,03,779	—1,43,726	...	...	1,10,44,039	11,90,340	3,06,583	2·79	4,40,296	—1,31,713	...	...
1892	49,87,689	2,32,966	34,096	0·68	1,99,337	—1,65,241	...	...	1,10,73,028	12,18,412	3,28,335	2·96	4,42,535	—1,14,200	...	...
1893	49,87,689	2,10,356	89,213	1·79	1,99,484	—1,10,271	...	...	1,11,37,125	12,90,798	3,48,572	3·13	4,44,246	—95,574	...	...
1894	49,87,689	2,20,237	89,289	1·79	1,99,508	—1,10,219	...	...	1,12,11,642	13,61,966	3,81,993	3·41	4,48,018	—66,025	...	...
1895	49,90,794	1,93,552	76,362	1·53	1,99,539	—1,23,177	...	...	1,13,18,247	14,04,021	4,02,233	3·61	4,50,104	—41,871	...	...
1896	49,96,305	2,06,078	83,859	1·68	1,99,745	—1,15,886	...	...	1,13,73,050	13,11,585	3,67,395	3·23	4,55,018	—87,623	...	...
1897	49,96,325	1,96,858	58,531	1·17	1,99,794	—1,41,263	...	...	1,14,06,534	12,01,143	2,81,272	2·47	4,56,230	—1,74,958	...	...
1898	49,96,325	2,09,600	77,827	1·56	1,99,833	—1,22,026	...	...	1,14,23,076	11,18,296	2,89,536	2·53	4,56,411	—1,66,875	...	...
1899	49,96,325	2,07,216	82,500	1·65	1,99,832	—1,17,332	...	...	1,15,34,107	11,55,032	2,99,555	2·60	4,59,296	—1,59,741	...	...
1900 (1st half)	*	1,75,380	80,754	...	99,937	—19,183	...	...	*	7,25,618	2,11,534	...	2,30,220	—18,686	...	...
1900 (2nd half)															...	
1901	Amalgamated with the Great Indian Peninsula railway.								Amalgamated with the Great Indian Peninsula railway.						...	...

Calendar year.	KHAMGAON BRANCH. Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.	AMRAOTI BRANCH. Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.	Rs.		Rs.	
1879	5,35,617	30,086	—266	...	146	100·69	4,77,043	69,904	16,175	3·39	224	76·86
1880	5,19,888	27,363	4,922	0·94	91	84·44	4,45,585	50,866	3,639	0·82	163	92·85
1881	4,99,271	41,596	4,561	0·92	*	*	4,45,663	53,994	34,124	7·72	*	*
1882	4,91,164	75,966	30,389	6·19	*	*	4,44,651	85,147	39,535	8·89	*	*
1883	4,90,996	62,657	22,469	4·58	151	64·14	4,44,860	96,160	44,887	9·38	308	53·84
1884	4,90,903	46,830	13,037	2·66	113	72·16	4,44,774	76,782	34,174	7·68	246	55·49
1885	4,90,739	41,363	11,020	2·25	...	...	4,44,730	80,903	34,447	7·75	...	...
1886	4,89,618	59,452	20,233	4·13	...	...	4,44,686	95,111	44,137	9·93	...	...
1887	4,89,180	53,479	16,990	3·47	...	...	4,44,308	88,157	35,855	8·07	...	...
1888	4,88,357	52,635	15,797	3·23	...	...	4,43,892	81,710	30,886	6·96	...	...
1889	4,90,911	65,372	22,528	4·59	...	...	4,45,615	1,02,023	41,671	9·35	...	...
1890	4,90,520	55,288	26,092	5·32	...	...	4,45,155	1,01,502	46,254	10·39	...	...
1891	4,90,408	66,675	32,620	6·65	...	...	4,49,395	1,12,909	53,893	11·88	...	...
1892	4,89,132	65,548	30,909	6·32	...	...	4,50,160	1,05,762	48,637	10·80	...	...
1893	4,87,567	21,697	21,997	4·51	...	...	4,49,998	43,941	43,056	9·57	...	...
1894	4,86,003	21,966	21,667	4·46	...	...	4,49,461	42,795	41,910	9·32	...	...
1895	5,20,947	26,031	26,031	5·00	...	...	4,49,988	39,137	38,254	8·50	...	...
1896	5,22,603	24,446	24,446	4·68	...	...	4,51,119	43,756	42,871	9·50	...	...
1897	5,22,150	13,901	13,901	2·66	...	...	4,52,445	30,746	29,862	6·60	...	...
1898	5,22,150	24,326	24,326	4·66	...	...	4,54,498	40,057	39,172	8·62	...	...
1899	5,22,150	41,850	14,850	2·84	...	...	4,54,417	33,099	32,214	7·09	...	...
1900	5,22,150	33,783	13,924	2·67	...	...	4,54,418	78,532	32,436	7·14	...	...
1901	5,22,150	49,378	23,337	4·47	120	52·74	4,51,915	1,08,578	50,537	11·12	365	53·73
1902 (1st half)	*	32,968	17,209	...	120	52·35	*	79,582	41,099	...	488	53·88
1902 (2nd half)												
1903	Amalgamated with the Great Indian Peninsula railway.						Amalgamated with the Great Indian Peninsula railway.					

* Included with the Great Indian Peninsula railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (h)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

5 (*b*) Agra-Delhi Chord railway (5′ 6″ gauge)—

This railway has been constructed by the State and is worked by the Great Indian Peninsula Railway Company.

Details of construction—

This railway is 119·75 miles long. Its construction was sanctioned in 1898 and it was opened in 1904.

There were, in addition, 6·06 miles under construction.

Permanent-way.—The line has been laid with 85-lb. bull-headed steel rails on 45-lb. cast iron chairs spiked with 3 spikes to deodar sleepers.

Ballast.—The line is ballasted with kunkur soling and stone ballast to bring it up to full section.

Fencing.—Kosi-Delhi section is fenced and Agra-Kosi section is being fenced.

Curves.—The sharpest curve is of 950 feet radius.

Gradients.—The ruling gradient of the line is 1 in 400, except between Raja Ki Mundi Junction and Agra Jail and between Delhi Sadr and Delhi Junction where it is 1 in 200 and 1 in 333, respectively.

Terms of contract—

This railway is being worked under a contract (between the Secretary of State and the Great Indian Peninsula Railway Company) which is under execution and which is to be deemed to have commenced on and from the day on which the Agra-Delhi Chord Railway was opened for public traffic.

The general conditions of the contract are as follows :—

Government aid.—The line is the property of the State.

Currency of contract.—The contract may be terminated on the 30th June or 31st December during its subsistence either by the Secretary of State or the Company giving to the other party not less than twelve calendar months' notice in writing.

Terms of working.—The charge for working expenses of the Agra-Delhi Chord Railway bears the same proportion to its gross earnings as the entire working expenses of the Great Indian Peninsula Railway "undertaking" including the Agra-Delhi Chord Railway bear to their combined gross earnings. The whole of the net earnings belong to Government.

Rates and fares.—The same as are in force on the Great Indian Peninsula Railway undertaking.

Statistics of working—

	Table I.						Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest charges.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1904 . . .	1,05,91,000	18,070	9,992	0·09	2,95,164	−2,85,172	43	44·71
1905 . . .	1,22,46,927	8,04,655	4,19,625	3·43	4,20,181	−556	140	47·85

5 (*c*) Bhopal-Itarsi railway (5′ 6″ gauge)—

Details of construction—

This railway is 57·39 miles long. Its construction was sanctioned in 1880 and it was opened in 1884.

Permanent-way.—The line is laid with the Indian Midland railway 80-lb. flat-footed steel rails on Indian Midland railway cast iron pot sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Terms of contracts—

The Bhopal-Itarsi railway is worked under the following :—

Agreement of—16th September 1880 (between the Government of India and Her Highness the Begum of Bhopal) for construction.

2nd December 1890, supplemental to that of 1880 for division of profits.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the contracts are as follows :—

Government aid.—The British Government have paid for the portion, 13·11 miles, in British territory, and a moiety of the cost of the bridge over the Nerbudda, or in all about 13 lakhs ; the Begum of Bhopal has contributed 50 lakhs for the portion of the line in her dominions. All additional capital has to be provided by Government.

Currency of contracts.—The provisions in the principal contract between the Secretary of State and the Railway Company itself with reference to the termination of that contract extend, and are applicable, to the Bhopal-Itarsi railway.

Power of Company to surrender contracts.—Nil.

Terms of working.—The Company receives a sum bearing the same percentage to the gross receipts of the Bhopal-Itarsi railway as the aggregate working expenses of the whole open system of the Company (including the Bhopal-Itarsi railway) bear to the aggregate gross receipts of that system. The balance of the gross receipts are divided in perpetuity between the British Government and the Ruler of Bhopal in proportion to the capital contributed by each party. In the event of the railway being worked at a loss, such loss to be borne in the same proportion.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 5}{\text{Sub-heads } (a) \text{ to } (i)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

5 (*c*) Bhopal-Itarsi railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Rates and fares.—The same rates and fares as are in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	TABLE I. Bhopal-Itarsi (British section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Bhopal-Itarsi (Native State section). Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	TABLE II. British section. Earnings per mile per week.	Proportion of expenses to earnings.	Native State section. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1880	...	...	...	...	...	...	1,21,846	...	...	...	...	...	...	...
1881	...	...	...	...	...	...	15,78,157	...	...	...	...	...	...	...
1882	12,50,000	14,376	2,704	0·08	50,000	−47,296	34,60,091	14,376	2,704	0·08	70	81·90	Included with British section	
1883	12,50,000	25,573	−9,135	...	50,000	−59,135	38,23,236	25,573	−9,135	...	43	135·72		
1884	12,50,000	7,664	−1,406	...	50,000	−51,406	45,83,261	28,102	−5,152	...	40	104·13		
1885	12,50,000	27,425	−3,374	...	50,000	−53,374	47,71,375	1,04,683	−14,789	...	Included with Jaora-Nimach railway.		Great Indian Peninsula railway.	
1886	12,50,000	27,822	−3,240	...	50,000	−53,240	48,26,036	1,47,416	−12,501	...				
1887	12,50,000	43,227	3,850	0·31	50,000	−46,150	48,09,939	1,85,576	14,818	0·31				
1888	12,50,000	55,117	5,340	0·43	50,000	−44,660	48,01,701	1,86,548	18,072	0·38				
1889	12,50,000	79,163	−5,422	...	50,000	−55,422	48,40,846	2,67,936	−18,351	...	117	106·85	117	106·85
1890	12,85,077	87,765	−16,572	...	50,351	−66,923	50,00,000	2,97,049	−56,093	...	130	118·88	130	118·88
1891	15,13,568	1,30,884	48,607	3·21	57,713	−9,106	50,00,000	4,66,431	1,73,154	3·46	200	62·50	199	62·50
1892	17,46,209	1,53,099	56,397	3·23	69,181	−12,734	50,00,000	4,47,797	1,56,883	3·32	226	63·16	195	62·96
1893	20,25,058	1,69,162	52,038	2·57	78,429	−26,391	50,00,000	4,24,236	1,30,925	2·62	251	69·17	185	69·17
1894	21,71,496	1,61,638	61,455	2·83	83,509	−22,054	50,00,000	3,80,217	1,44,679	2·89	237	61·98	166	61·97
1895	22,47,963	1,42,658	46,114	2·05	89,323	−43,209	50,00,000	3,18,074	1,02,821	2·06	209	67·68	138	67·64
1896	22,71,877	1,63,688	62,744	2·76	90,107	−27,363	50,00,000	3,61,363	1,38,532	2·77	241	61·75	157	61·63
1897	22,97,134	1,52,215	61,135	2·66	91,805	−30,671	50,00,000	3,31,379	1,33,070	2·66	223	59·84	144	59·84
1898	23,24,365	1,93,364	79,435	3·42	92,477	−13,042	50,00,000	4,17,019	1,71,375	3·43	284	58·81	181	58·90
1899	23,61,938	2,09,611	84,080	3·56	93,303	−9,223	50,00,000	4,47,225	1,79,444	3·59	307	59·39	194	59·88
1900	23,87,339	2,55,120	1,27,332	5·33	95,293	+32,039	50,00,000	7,90,489	2,67,288	5·35	375	50·12	332	50·06
1901	25,46,891	2,92,861	1,44,235	5·66	98,989	+45,246	50,00,000	5,85,152	2,88,838	5·77	430	50·75	254	50·64
1902	28,02,330	3,53,111	1,71,236	6·11	1,06,632	+64,604	50,00,000	6,30,630	3,16,683	6·33	518	51·61	274	49·74
1903	30,92,697	3,77,177	1,91,443	6·19	1,17,285	+74,158	50,00,000	6,31,911	3,21,328	6·43	559	49·48	327	48·84
1904	31,52,907	3,95,734	1,98,066	6·28	1,20,127	+77,939	50,00,000	6,43,742	3,22,374	6·45	583	50·14	279	49·81
1905	31,76,930	3,25,313	1,67,305	5·27	1,23,241	+44,064	50,00,000	5,21,943	2,67,959	5·36	477	48·57	227	486·16

5 (*d*) Bhopal-Ujjain railway (5′ 6″ gauge)—

Details of construction—

This railway is 113·27 miles long. Its construction was sanctioned in 1892 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced only at, and in the vicinity of, stations, towns and important level crossings.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The Bhopal-Ujjain and Bina-Goona-Baran railways are worked under the following :—

Agreements of—15th July 1896, 4th August 1896, 12th May 1899 (between the Government of Her Highness the Begum of Bhopal and that of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

20th February 1899 (between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company) for working.

16th March 1905 (between the Tonk and Gwalior Durbars) for purchase by the latter of that section of the Goona-Baran Railway which lies within the Tonk State.

Contract of—21st December 1900 (between the Secretary of State and the Indian Midland Railway Company) for maintenance and working by the Great Indian Peninsula Railway Company.

The general conditions of the agreements are as follows :—

Government aid.—The line from Bina to Baran is owned jointly by the Durbars of the Gwalior and Kotah States, the Gwalior Durbar having purchased the portion which originally belonged to the Tonk Durbar and that from Bhopal to Ujjain by the Bhopal and Gwalior States.

Currency of agreements.—The agreements may be terminated on the expiry of ten years from the dates of the opening of the railways, or on the 30th June or 31st December in any year thereafter, on twelve months' notice in writing being given by either party.

Terms of working.—The Company retains 50 per cent. of the gross receipts of the railway each half-year; and receives rent for works, &c., in sole and joint use at Bina and Ujjain Junctions respectively; and rent for the telegraph lines and instruments when not the property of the railway. (These terms are applicable to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Gwalior State, except in the case of that portion which originally belonged to the Tonk Durbar and was subsequently purchased by the Gwalior Durbar.)

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (h)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*contd.*

5 (*d*) Bhopal-Ujjain railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

The Company retains out of the gross receipts a sum (which includes any single item of capital expenditure not exceeding Rs. 1,000 to be classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile open in each half-year) bearing the same percentage to the entire gross receipts of the railway for each half-year as the aggregate working expenses of the whole system of the Company (including the railway) bear to the gross receipts of that system for the same half-year. (These terms are applicable to those portions of the Bhopal-Ujjain and Bina-Goona-Baran railways which are owned by the Bhopal and Kotah Durbars, and to that portion which originally belonged to the Tonk Durbar and was subsequently purchased by the Gwalior Durbar.)

Rates and fares.—The same rates and fares as are in force from time to time on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	88,462	...	...	...	...	...
1893	22,76,863	...	...	...	...	...
1894	53,53,849	...	...	...	...	...
1895	69,69,381	...	...	...	...	...
1896	77,77,604	3,69,114	1,80,218	2·32	63	51·17
1897	75,36,190	3,72,337	1,84,660	2·45	63	50·40
1898	75,85,789	4,16,940	2,05,051	2·70	71	50·82
1899	76,54,290	5,82,341	2,77,911	3·63	99	52·28
1900	76,88,020	9,46,349	4,65,681	6·06	161	50·79
1901	77,61,569	5,45,956	2,62,044	3·38	93	52·00
1902	78,02,355	5,52,063	2,92,357	3·75	99	52·36
1903	78,11,402	4,44,766	2,23,049	2·86	76	49·85
1904	78,14,670	4,54,721	2,27,397	2·91	77	49·99
1905	78,35,712	6,08,240	3,06,659	3·91	103	51·23

5 (*e*) Bina-Goona-Baran railway (5′ 6″ gauge)—

Details of construction—

This railway is 145·63 miles long. Its construction was sanctioned in 1892 and it was opened in 1899.

Permanent-way.—The line is laid with 75-lb. flat-footed steel rails on deodar sleepers.

Ballast.—The line is ballasted with broken stone and laterite.

Fencing.—The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient is 1 in 125.

Terms of contract.—The terms of the Bhopal-Ujjain railway, [5 (*d*)], apply.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	
1891	51,905	...		...	...	...
1892	2,57,611	...	...	...	...	...
1893	35,18,701	...	...	...	...	...
1894	47,79,618	...	...	...	...	...
1895	49,81,035	...	...	...	19	54·42
1896	54,16,074	91,110	36,821	0·68	24	59·60
1897	87,73,621	1,02,386	43,446	0·50	27	57·57
1898	97,66,063	1,30,004	58,010	0·59	35	55·36
1899	99,31,680	2,67,359	1,26,108	1·27	43	52·83
1900	1,00,21,605	4,34,847	2,20,490	2·20	57	49·29
1901	1,00,43,236	2,52,716	1,22,970	1·22	33	51·34
1902	99,14,442	2,38,823	1,19,792	1·21	32	52·71
1903	99,62,459	3,21,585	1,62,447	1·63	42	49·49
1904	98,87,016	3,91,886	1,97,715	1·98	52	49·54
1905	99,90,394	3,68,669	1,88,121	1·88	49	50·83

5 (*f*) Indian Midland railway (5′ 6″ gauge)—

Details of construction—

The open mileage of the Indian Midland railway is 807·90 miles, which may be divided into main line (Bhopal to Agra Road), 316·63 miles, and branches, 491·27 miles.

Sanction was first given to the construction of this line in 1876 and the main line was opened throughout in 1889. Besides the above there are 2·24 miles under construction.

Permanent-way.—The whole of the main line, the Manikpur branch, the Cawnpore branch from Jhansi to mile 326·64, and from Bina to Katni, are laid with 80-lb. flat-footed steel rails on cast iron pot sleepers. The Cawnpore branch from mile 326·64 to Hamirpur Road is laid with East Indian railway 75-lb. double-headed steel rails on Denham Olpherts' sleepers. The East Indian railway type rails and Denham Olpherts' sleepers are being gradually renewed with Indian Midland railway 80-lb. flat-footed steel rails and cast iron oval pots.

Ballast.—The line is ballasted with gravel, laterite, kunkur or stone.

Fencing.—The main line is fenced throughout and the branches are partially fenced.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads } (a) \text{ to } (h)}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.***

5 (*f*) Indian Midland railway (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Curves.—There are no curves with a radius of less than 990 feet.

Gradients.—The ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi-Cawnpore branch is practically level, except at bridge approaches where the gradients are 1 in 250 and 1 in 300, and between Jhansi and Garhmau where it is 1 in 200.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—2nd October 1885—Indian Midland Railway Company's principal contract.
18th March 1890—Contract for the acquisition of the Scindia railway.
13th June 1896—Contract for the Saugor-Katni railway.
21st December 1900—Contract for the transfer of the working of the Indian Midland railway to the Great Indian Peninsula Railway Company.

Government aid.—Interest at 4 per cent. per annum in sterling is guaranteed on £3,000,000 share capital. On further capital that may be required the guarantee to be 4 per cent. or such other rate as may be agreed upon. A considerable amount of capital has been advanced by Government for the existing system; and, in the case of the Saugor-Katni extension, it has been agreed that all money required for expenditure in India shall be supplied by the Government, the Company raising only the amount required for expenditure in England. Land was provided free.

Currency of contracts—(1) *Indian Midland railway contract.*—The contract of 1885 may be determined by Government giving 12 months' previous notice on the 31st December 1910, or on the 31st December of any succeeding tenth year. Government may also terminate the contract at any time, on six months' notice, if the Company fails to fulfil its obligations, or if the line be worked at a loss for not less than three half-years continuously. On the termination of the contract the Company is to hand over to Government the railway and all its belongings of every description, and Government are to repay the amount at par of the share capital which has been paid by the Company. The contract of 1900 is current for a period of 25 years from the 1st July 1900; but the Indian Midland Railway Company's right to a 4 per cent. guarantee on share capital and one-fourth share of surplus profits remains in full force till the termination of either the contract of 1885 or that of 1900.

(2) *Scindia and Saugor-Katni railways contracts.*—The contracts of 1890 and 1896 run concurrently with that of 1885, to which they are supplemental.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings for any calendar year will be deducted working expenses, and the net earnings applied towards payment to Government of interest on advances of capital made by it to the Company and for repayment of the interest paid by it to the Company for that year, the balance to be divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

TABLE I.								TABLE II.			
								Scindia.		Indian Midland.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.	
1878	...	...	...	...	...	...	...	54	133·30	...	...
1879	73,22,551	90,916	—38,772	...	3,06,178	...	—3,37,950	39	134·95	...	...
1880	81,63,253	2,01,823	20,129	0·25	3,57,620	...	—3,37,491	58	88·05	...	...
1881	38,16,668	3,01,681	78,342	0·91	3,48,809	...	—2,70,467	81	77·35	...	...
1882	87,65,714	3,29,299	92,231	1·05	3,47,303	...	—2,55,072	85	71·99	...	...
1883	92,92,537	3,38,511	1,59,716	1·72	3,56,750	...	—1,97,034	87	52·32	...	...
1884	1,18,68,1[illegible]	3,68,326	1,73,603	1·45	3,74,122	...	—2,01,519	95	53·14	...	...
1885	1,60,14,107	3,94,081	1,99,690	1·24	6,48,112	...	—4,48,432	101	49·33	...	...
1886	2,48,06,292	3,91,532	2,14,526	0·86	18,69,268	...	—16,54,742	101	49·69	56	82·03
1887	5,10,96,457	6,32,204	2,78,043	0·54	20,00,184	...	—17,22,141	117	46·62	81	80·63
1888	6,96,63,213	10,27,638	3,74,204	0·54	28,55,488	...	—24,81,284	95	47·74	89	72·53
1889	7,84,45,085	30,69,255	6,83,111	0·87	31,24,456	...	—24,91,045	...	...	92	77·32
1890	8,32,79,427	31,23,365	5,99,780	0·72	36,09,286	...	—30,09,506	...	...	86	80·90
1891	8,52,46,143	41,62,361	13,52,172	1·59	33,12,200	...	—19,60,028	...	...	115	67·51
1892	8,65,79,006	44,77,625	17,26,260	1·99	37,23,985	...	—19,97,725	...	...	124	61·45
1893	8,71,62,843	44,59,053	17,00,409	1·95	41,40,194	...	—24,39,785	...	...	123	61·87
1894	8,78,06,437	52,22,033	22,02,834	2·51	42,59,815	...	—20,57,481	...	...	144	57·85
1895	8,81,49,985	44,91,707	16,48,360	1·87	45,97,495	...	—29,49,135	...	...	124	68·30
1896	9,25,53,896	48,51,951	20,17,829	2·18	44,23,983	...	—24,06,154	...	...	134	58·42
1897	9,77,94,421	54,89,540	24,06,565	2·46	42,53,893	...	—18,47,328	...	...	150	56·16
1898	9,96,74,805	56,25,823	25,11,911	2·52	39,99,986	...	—14,88,075	...	...	147	55·35
1899	10,16,34,072	64,77,226	27,82,950	2·74	39,66,461	...	—11,83,511	...	...	152	57·03
1900	10,31,35,002	90,60,560	48,72,287	4·72	38,18,460	...	+10,53,827	...	...	213	46·23
1901	10,58,27,081	82,43,068	42,50,587	4·02	38,82,361	1,83,164	+ 1,79,562	...	...	199	48·43
1902	10,62,11,714	90,49,628	44,86,267	4·22	41,04,505	7,330	+ 3,74,432	...	...	209	50·43
1903	10,98,96,302	80,86,118	40,92,942	3·73	41,85,502	2,062	— 94,622	...	...	180	49·35
1904	11,22,35,779	82,90,712	41,48,862	3·70	42,59,767	...	— 1,10,905	...	...	183	49·96
1905	11,31,48,178	79,91,323	40,84,528	3·61	42,77,173	...	— 1,92,645	...	...	178	48·89

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 5}}{\text{Sub-heads (a) to (h)}}$. **GREAT INDIAN PENINSULA RAILWAY SYSTEM**—*concld.*

5 (*g*) Gwalior Light railway (2′ 0″ gauge)—

Details of construction—

The open mileage of this railway is 183·53 miles, and may be divided into the following sections :—(1) Gwalior to Sipri, 73·81 miles, (2) Gwalior to Bhind, 52·33 miles, and (3) Gwalior to Sabalgarh, 57·39 miles. The several sections were opened in 1899, 1899 and 1904, respectively.

Besides the above there are 66·66 miles under construction.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails, laid on sál and steel trough sleepers.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing.—The line is fenced between Gwalior and Morar only.

Curves.—The sharpest curve in station yards has a radius of 200 feet. The sharpest curve out of stations has a radius of 955 feet.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—11th October 1900 (between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company) for working.

The general conditions of the agreement are as follows :—

Government aid.—Nil. The Gwalior Light railway is the property of the Gwalior Durbar.

Currency of contract.—Either party may determine the agreement by giving three months' notice.

Terms of working.—The gross receipts are collected and treated as receipts of the Indian Midland Railway Company and from them are deducted the actual expenditure in the Traffic and Audit departments, for station and train staff, audit clerks, on printing and stationery and stores consumed, and all other expenses connected therewith and 5 per cent. per annum for construction and maintenance of accommodation required for the exclusive use of the Light railway; 7½ per cent. for ballast, permanent-way, etc., including maintenance and renewal *plus* 15 per cent. to cover supervision and general charges other than those rendered in the accounts. The balance is paid over to the Gwalior Durbar.

Rates and fares.—Rates and fares are the same as those in force on the Great Indian Peninsula railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.	
1896	2,166	...	...	...	...	...
1897	1,03,552	...	...	...	...	...
1898	9,30,815	...	...	...	...	...
1899	22,79,267	4,094	—4,113	...	6	258·32
1900	27,10,557	84,617	—137	...	13	100·16
1901	31,07,277	82,227	—520	...	13	100·63
1902	32,77,104	1,00,577	9,346	0·33	17	91·47
1903	41,76,953	1,66,003	68,226	1·63	25	58·90
1904	46,62,993	1,85,284	52,501	1·13	23	71·36
1905	54,72,847	1,89,735	52,745	0·96	20	72·20

5 (*h*) Matheran Light railway (2′ 0″ gauge)—

Details of construction—

The line, from Neral station on the Great Indian Peninsula railway to the hill station of Matheran, will be 12·79 miles long.

Its construction by Mr. Abdul Husein Adamjee Peerbhoy of Bombay has been authorized by an order contained in the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 23th July 1904. On completion the line will be worked by the Great Indian Peninsula Railway Company.

Terms of contract—

This railway will be maintained and worked under—

Terms—Contained in the order accompanying Bombay Government Notification No. 34, dated the 28th July 1904.

The general conditions are as follows :—

Government aid.—Free provision of Government land.

Currency of agreement.—Government may purchase the undertaking as a going concern from the promoter on 1st January 1940, or at the expiration of any subsequent period of 5 years, at 25 times the average net earnings of the undertaking for the 3 calendar years immediately preceding the date of purchase.

Terms of working.—Not yet settled.

Rates and fares.—Certain maxima have been fixed.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—**

Lines comprising the system.—The Madras railway system is made up of—

		Open line.	Under construction or sanctioned for construction.	Total.
		Miles.	Miles.	Miles.
(*a*) Madras railway	(5′ 6″ gauge)	904·01	...	904·01
(*b*) Kolar Gold-fields railway	(5′ 6″ gauge)	9·88	...	9·88
(*c*) Madras (North-East line) (Southern section of the East Coast (State) railway)	(5′ 6″ gauge)	497·19	0·85	498·04
(*d*) Nilgiri railway	(3′ 3⅜″ gauge)	16·99	11·50	28·49
(*e*) Shoranur-Cochin railway	(3′ 3⅜″ gauge)	64·75	...	64·75
(*f*) Tirupattur-Krishnagiri railway	(2′ 6″ gauge)	25·38	...	25·38
(*g*) *Ashikal-Mangalore extension*	(5′ 6″ *gauge*)	...	77·27	77·27
(*h*) *Salem-Attur railway*	(5′ 6″ *gauge*)	...	36·06	36·06
(*i*) *Morappur-Dharmapuri railway*	(2′ 6″ *gauge*)	...	18·14	18·14
	Total	1,518·20	143·82	1,662·02

Running powers—

Foreign lines over Home line—

		Miles.
Bengal-Nagpur railway, Waltair to Vizagapatam (including Wharf and Swamp lines)	for passenger and goods trains.	4·97
Southern Mahratta railway, Tadepalli to Bezwada		2·97
Nizam's Guaranteed State railway, distant signal at Bezwada to Bezwada station		0·89
	Total	8·83

6 (*a*) Madras railway proper (5′ 6″ gauge)—

Details of construction—

The open mileage of the Madras railway proper amounts to 904·01 miles. This may be divided into (1) the *South-West line*, main line (Madras to Azhikal), 472·73 miles; branches, 123 miles: and (2) the *North-West line* (Arkonam to Raichur), 308·28 miles. Of the above 43·43 miles are double line.

Sanction was first given to the construction of the South-West line in 1853 and it was opened through to Calicut in 1888. The North-West line was sanctioned in 1859 and was opened through to Raichur in 1871.

Permanent-way.—The present type of permanent-way for the main line is 80-lb. bull-headed steel rails, laid on cast iron pots, each weighing 112 lbs. The section, Calicut to Azhikal, is laid with 60-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient between Madras and Mallapuram is 1 in 200; between Mallapuram and Calicut, 1 in 100 (except at Mallapuram Ghât where it is 1 in 70 and at Walayar Ghât where it is 1 in 62); between Calicut and Cannanore, 1 in 150; between Jalarpet and Bangalore, 1 in 100 (except at Kuppam Ghât where it is 1 in 66); between Podanur and Mettupalaiyam, 1 in 80; between Olavakkot and Palghat, 1 in 106; between Walajah Road and Ranipet, 1 in 150; and between Arkonam and Raichur, 1 in 80 (except at Ballapalli Ghât where it is 1 in 66).

Terms of contracts—

The Madras railway is worked under the following contracts:—

Contracts of—22nd December 1852 (South-West line).

19th December 1855 (South-West line).

13th August 1858 (North-West line).

2nd January 1871 (Amalgamation).

18th January 1901 (Calicut-Azhikal extension).

1st November 1901 (Walajah Road (Arcot)-Ranipet branch).

The general conditions of the contracts are as follows:—

Government aid.—Guarantee of interest in sterling at 5 per cent. for term of contract. On some portion of the share capital and on debentures lower rates of interest are guaranteed. Land also was provided free of cost.

Currency of contracts.—In ninety-nine years from 1st April 1857 the line reverts to Government on paying for the rolling-stock at its fair value: provided the Company had not previously given notice terminating the contract. Government may, within six months after the expiration of 25 or 50 years of the term, determine the contract by purchase at the mean market value of the shares during the three preceding years. Possession to be taken of the railway at the half-yearly day next but one following the notice. Government may also determine the contract at any time, on giving three months' notice, if the Company fails to observe its obligations, Government repaying the capital expended.

NOTE.—Government relinquished their right to determine the contract at the end of the 25th year and the only remaining opportunity of giving notice of purchase will be in 1907 within six months after 1st April.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM—*contd.***

6 (*a*) Madras railway proper (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Power of Company to surrender contract.—The Company may, at any time, surrender on six months' notice, receiving back the capital expended.

Terms of working.—As to the lines covered by the contract of 2nd January 1871, after deducting the working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year) the surplus profits, after repayment of the guaranteed interest of each half-year converted at the rate of exchange of 1*s.* 10*d.* per rupee, are divided equally between Government and the Company. As to the Calicut-Azhikal railway working expenses are calculated at the average rate prevailing in each half-year over the entire system, and if the net earnings in any half-year exceed the interest charges converted at the prescribed rate of exchange, one-fifth belongs to the Company; but any deficiency in one half-year is a first charge on the net receipts of that and the next succeeding half-year of every line of railway for the time being belonging to the Company. Subject to the provisions in the contract of 18th January 1901 the covenants and provisions of the several principal Indentures apply to the Calicut-Azhikal railway.

Rates and fares.—Under the contract Government fixed maxima rates and fares, which cannot be altered by Government until the net receipts exceed 10 per cent. on the capital outlay. The fixed maxima rates cannot be altered by the Company without Government sanction. Authority, however, has been given to the Company, by an executive order, to vary its rates within the prescribed maxima without reference to Government.

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Guaranteed interest (at current rates of exchange).	Company's share of net earnings.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	11,45,68,493	66,26,486	20,75,170	1·81	57,04,205	...	—36,29,035
1880	11,39,78,220	61,62,546	19,57,197	1·73	57,16,332	...	—37,59,195
1881	11,40,07,808	63,11,312	20,75,856	1·82	57,16,365	...	—36,40,509
1882	11,39,69,608	69,18,571	25,70,841	2·25	56,89,011	...	—31,18,170
1883	11,39,92,074	66,31,909	25,26,549	2·22	57,08,416	...	—31,81,867
1884	11,42,51,164	71,41,318	29,35,687	2·57	64,23,432	...	—34,87,745
1885	11,50,33,160	76,57,993	32,79,168	2·85	67,36,206	...	—34,57,038
1886	11,59,81,297	79,66,097	32,29,243	2·78	71,24,952	...	—38,95,709
1887	11,40,70,190	81,72,535	28,80,029	2·52	73,20,207	...	—44,40,178
1888	11,53,78,656	85,31,054	35,21,615	3·05	76,23,851	...	—41,02,236
1889	11,63,84,605	91,10,894	37,38,421	3·21	76,69,934	...	—39,31,513
1890	11,79,84,234	95,06,134	45,21,480	2·83	68,85,958	...	—23,64,478
1891	11,89,52,099	93,44,638	39,06,529	3·28	73,92,186	...	—34,85,657
1892	11,97,71,835	96,24,670	42,92,133	3·58	83,62,369	...	—40,70,236
1893	12,03,89,499	1,05,05,036	54,21,742	4·50	84,82,732	...	—30,60,990
1894	12,05,25,315	1,03,21,012	49,47,863	4·10	96,56,469	...	—47,08,606
1895	12,08,91,797	1,12,08,407	58,10,310	4·80	96,17,435	53,195	—38,60,320
1896	12,11,52,091	1,08,80,251	53,85,291	4·44	89,92,684	...	—36,07,393
1897	12,15,01,808	1,14,65,314	59,82,565	4·92	84,81,597	91,135	—25,90,167
1898	12,22,69,990	1,07,20,483	54,12,657	4·43	82,40,191	90,546	—29,18,080
1899	12,34,93,025	1,05,45,102	50,16,254	4·06	80,58,144	...	—30,41,890
1900	12,62,82,369	1,13,39,222	53,70,820	4·25	81,24,701	...	—27,53,881
1901	13,13,51,379	1,14,86,803	57,85,603	4·40	83,15,733	...	—25,30,130
1902	13,50,23,683	1,18,41,074	57,91,420	4·29	84,41,454	...	—26,50,044
1903	13,64,08,517	1,26,21,022	55,67,864	4·08	84,39,831	...	—28,71,967
1904	13,71,10,000	1,37,65,064	62,73,135	4·57	86,30,058	...	—23,56,923
1905	13,85,08,336	1,39,16,956	58,09,047	4·24	87,03,239	...	—28,34,192

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	
1856	75	51·66
1857	91	47·13
1858	93	55·53
1859	122	60·35
1860	117	73·58
1861	91	71·08
1862	84	74·02
1863	110	68·57
1864	133	49·62
1865	145	45·69
1866	147	45·62
1867	153	43·47
1868	161	41·48
1869	171	49·16
1870	146	52·84
1871	139	51·27
1872	143	53·19
1873	157	56·04
1874	132	64·67
1875	144	70·23
1876	159	64·38
1877	225	59·26
1878	148	76·05
1879	148	68·63
1880	138	63·24
1881	141	67·11
1882	155	62·84
1883	148	61·90
1884	160	58·89
1885	171	57·13
1886	178	59·46
1887	189	64·76
1888	195	58·72
1889	209	58·97
1890	218	52·44
1891	214	58·20
1892	221	55·40
1893	241	48·39
1894	237	52·06
1895	257	47·55
1896	249	50·50
1897	263	47·65
1898	246	49·51
1899	240	52·43
1900	254	51·75
1901	253	49·63
1902	256	50·25
1903	281	55·88
1904	298	54·43
1905	296	57·83

6 (*b*) Kolar Gold-fields railway (5′ 6″ gauge)—

The railway was constructed by the Mysore State in order to provide facilities for the gold-fields.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

6 (*b*) Kolar Gold-fields railway (5′ 6″ gauge)—*concld.*

Details of construction—

The railway is 9·88 miles long. It connects Bowringpet with Marikuppam. Its construction was sanctioned in 1892 and it was opened in 1894.

Permanent-way.—The line is laid with 76-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 66.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—1st July 1902 (between the Mysore Government and the Madras Railway Company) for working and maintenance with effect from 1st January 1901.

The general conditions of the agreement are as follows :—

Government aid.—The line is the property of the Mysore State.

Currency of agreement.—The agreement to remain in force subject to six months' notice from either side on the 30th of June or the 31st of December of any year.

Terms of working.—The Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system, including this line, bear to the gross earnings of that system, and 5 per cent. of the gross earnings of the railway for rolling-stock.

Rates and fares.—Subject to certain special rates and fares, the same rates, etc., as are in force from time to time on the Madras railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	₹	Rs.	
1892	27,661	...	...	...	...	...
1893	5,27,634	...	...	...	...	...
1894	6,56,175	75,771	29,273	4·46	249	61·37
1895	6,61,654	1,52,953	66,379	10·03	294	56·60
1896	7,45,004	1,55,317	63,287	8·50	299	59·25
1897	7,91,074	2,08,854	90,278	11·41	402	56·77
1898	8,09,537	2,04,002	82,133	10·15	392	59·82
1899	10,79,552	1,77,667	56,827	5·27	342	68·01
1900	10,77,901	2,08,892	67,093	6·22	402	67·88
1901	11,20,330	2,17,661	91,877	8·20	421	57·79
1902	11,38,480	2,16,629	84,864	7·45	422	60·83
1903	11,62,504	2,07,257	75,227	6·47	403	67·70
1904	11,73,128	2,44,744	89,230	7·61	476	63·54
1905	11,87,864	1,88,402	67,600	5·69	367	64·12

6 (*c*) Madras (North-East line) railway (5′ 6″ gauge)—

Details of construction—

The North-East line, which is the southern portion of the old East Coast railway, is 497·19 miles long. It consists of 485·26 miles of main line (Washermenpet to Waltair) and 11·93 miles of branches.

Its construction was sanctioned in 1890 and it was opened throughout in 1900.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on wooden and pea-pod steel sleepers. The wooden sleepers are gradually being renewed by cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced only in the vicinity of towns, stations and level crossings.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Madras and Kistna canal is 1 in 200, and between Kistna canal and Waltair, 1 in 150.

Terms of contract—

The line is worked under the following contract :—

Contract of—31st December 1902 (between the Secretary of State and the Madras Railway Company) for maintenance, management and working.

The general conditions of the contract are as follows :—

Currency of contract.—The contract is to continue in force till the 31st December 1907. If the original contract with the Company, dated the 2nd January 1871, is for any reason terminated under the provisions thereof prior to the expiry of the term of this contract, the latter also will, *ipso facto*, terminate at the same time. The contract may also be terminated after twelve months' notice on the 1st April of any year subsequent to 1904.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

6 (*c*) Madras (North-East line) railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

If the contract is determined by notice at any time previous to the 1st April 1907, and if the ratio of the working expenses to the gross earnings of the Company shall have been raised, by reason of the Company having worked the State railway under this contract, so that the total working expenses of the Company's system from the 1st January 1901 to the termination of the contract shall exceed 50 per cent. of the total gross earnings of the Company's system during such period, the Company will be entitled to suitable compensation for such increase.

Terms of working.—The working expenses of the State railway are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of line open to traffic for Government supervision and control; and the following :—

the actual expenditure incurred under the account heads of "Maintenance and renewal of permanent-way," "Repairs of bridges, etc., wages and materials," "Conservancy of rivers," and "Repairs of staff quarters";

the share of the general working expenses of the system under the remaining heads of account in proportion to the gross earnings of the State railway;

the allowances and interest payable under the contract for the use by the State railway of the Company's terminal station at Madras;

the expenditure incurred by the Company in replacing or repairing the State railway locomotive engines and tenders;

The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Government have reserved the power to require, at six months' notice, the retransfer of the Junction station at Waltair and the branch taking off from the Junction to Vizagapatam.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	TABLE II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1890	3,79,490	...	...	...	7,590	—7,590	...	...	The figures prior to 1901 relate to the whole of the East Coast (State) railway.
1891	1,10,69,894	...	...	...	2,33,786	—2,33,786	...	...	
1892	2,60,11,131	...	...	...	7,41,621	—7,41,621	...	...	
1893	3,58,67,473	4,98,660	1,53,732	0·43	13,48,868	—11,95,136	68	84·69	
1894	4,39,47,727	14,80,678	1,50,921	0·34	15,92,909	—14,41,988	98	89·81	
1895	5,09,41,876	19,04,251	3,29,184	0·65	19,12,886	—15,88,702	90	82·71	
1896	6,33,64,948	24,66,573	5,39,901	0·85	23,72,875	—18,32,974	94	77·98	
1897	7,22,26,070	29,21,162	8,92,453	1·23	26,96,796	—18,44,343	100	69·59	
1898	8,24,02,269	28,10,742	6,69,831	0·81	30,98,828	—24,28,997	94	76·46	
1899	8,65,93,097	43,92,237	15,37,294	1·78	35,14,602	—19,77,308	104	65·11	
1900	8,80,71,731	64,04,543	26,54,794	3·01	34,46,555	—7,91,761	143	56·10	
1901	6,07,27,375	45,68,155	20,31,210	3·34	24,51,072	—4,19,862	176	65·62	
1902	6,16,89,605	45,46,551	16,19,128	2·62	24,46,187	—8,27,059	177	64·39	
1903	6,33,83,510	45,18,656	15,53,337	2·45	24,82,162	—9,28,825	176	65·62	
1904	6,43,95,839	50,43,367	15,61,875	2·43	25,44,580	—9,82,705	196	69·03	
1905	6,50,33,641	67,36,215	26,65,781	4·10	25,77,504	+88,277	262	60·43	

6 (*d*) Nilgiri railway (3′ 3⅜″ gauge)—

The old Nilgiri Railway Company was registered on the 30th September 1885 with a nominal capital of Rs. 25,00,000 and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The old Company went into liquidation in April 1894; and in February 1896 a new Company was formed to purchase the line from the old Company and to supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by Government for £235,000 on the 1st January 1908.

Details of construction—

The open mileage of this railway is 16·99 miles. The line connects Mettupalaiyam with Coonoor. It was sanctioned in 1892 and was opened in 1899.

Besides the above there are under construction 11·50 miles, *viz.*, from Coonoor to Ootacamund.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*contd.*

6 (*d*) Nilgiri railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Permanent-way.—The permanent-way consists of flat-footed steel rails, 50 lbs. to the yard, laid on pyinkado sleepers. Between Kallar and Coonoor, there is also a central rack rail with channel bars.

Ballast.—The line is ballasted with clean broken granite.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 318 feet radius.

Gradients.—The ruling gradient is 1 in 12·5.

Terms of contract—

The railway is worked by the Madras Railway Company under the following terms (approved in Government of India letter No. 563 R. T., dated the 27th June 1903)—

Government aid.—The line is the property of the State.

Currency of agreement— } The agreement may be terminated at any time on six months' notice from either
Power to determine agreement— } party.

Terms of working.—The Nilgiri railway to pay actual outlay on engineering maintenance and for fuel, and repairs and renewals of engines and carriage and wagon stock. For all other expenses of working the Madras railway to receive 25 per cent. of gross earnings, *plus* 10 per cent. of the net receipts.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
1890	67,850	...	...	...	...	...	...	...	...	...	...
1891	2,89,134	...	...	...	...	...	...	...	...	...	...
1892	8,29,751	...	...	...	...	...	...	...	...	...	...
1893	15,50,000	...	...	...	...	...	...	...	...	...	...
1894	18,50,000	...	...	...	...	...	...	...	...	...	...
1895	22,60,000	...	...	...	...	...	...	...	...	...	...
1896	18,92,610	...	...	...	...	...	...	...	...	...	...
1897	36,84,977	...	...	...	...	...	...	...	...	...	...
1898	44,54,035	...	...	...	...	...	...	...	...	...	...
1899	47,89,944	84,448	20,209	0·42	24,392	44,600	0·93	...	...	175	76·06
1900	48,96,490	1,76,032	86,642	1·77	23,006	1,19,648	2·44	...	...	200	42·83
1901	48,74,254	2,41,336	1,37,883	2·83	...	1,37,883	2·83	...	...	275	42·87
1902	49,08,431	3,09,063	1,12,111	2·28	...	1,12,111	2·28	...	...	352	63·73
1903	35,24,265	2,74,905	73,988	2·10	...	73,998	2·10	1,65,497	−91,509	311	73·09
1904	35,84,423	2,90,129	66,162	1·85	...	66,162	1·85	1,33,384	−67,222	328	77·20
1905	43,86,192	3,15,492	48,972	1·12	...	48,972	1·12	1,35,878	−86,906	357	84·48

6 (*e*) Shoranur-Cochin railway (3′ 3⅜″ gauge)—

Details of construction—

The railway is 64·75 miles long. It connects Shoranur with Ernakulam. It was sanctioned in 1899 and opened in 1902.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout with stone and sand, chiefly the former.

Fencing.—The line is fenced in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is of 818·57 feet radius.

Gradients.—The ruling gradient is 1 in 80.

Terms of contract—

The Shoranur-Cochin railway is worked under the following agreement:—

Agreement of—1st January 1901 (between His Highness the Raja of Cochin and the Madras Railway Company) for construction and working.

The general conditions of the agreement are as follows:—

Government aid.—The line is the property of the Cochin State.

Currency of agreement.—This agreement is to remain in force until the termination of the agreement, dated the 2nd January 1871, between the Secretary of State and the Madras Railway Company.

Terms of working.—The Company charges for working the same proportion of the total revenue expenditure as the gross earnings of the Shoranur-Cochin railway bear to the gross earnings of the Madras railway system including the Shoranur-Cochin railway. After providing, from the net earnings, for the second contribution to the Madras Railway Provident Institution and for interest at the rate of 3 per cent. per annum on the booked capital expenditure of the Shoranur-Cochin railway including land, the balance is divisible between the Cochin Durbar and the Madras Railway Company in the proportion of four-fifths to the Durbar and one-fifth to the Company.

Rates and fares.—The same as are generally applicable from time to time to the system of railways worked by the Company.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 6}}{\text{Sub-heads (a) to (i)}}$. **MADRAS RAILWAY SYSTEM**—*concld.*

6 (*e*) Shoranur-Cochin railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	53,921	...	...	...	...	...
1899	80,927	...	...	...	...	...
1900	28,47,394	...	...	...	...	...
1901	50,82,280	...	...	...	...	...
1902	63,66,301	1,34,845	78,299	1·15	69	45·64
1903	64,41,390	3,52,964	1,98,033	3·07	105	43·90
1904	67,88,610	3,92,782	1,94,344	2·86	117	50·55
1905	68,50,214	3,86,945	1,61,395	2·36	115	58·29

6 (*f*) Tirupattur-Krishnagiri railway (2′ 6″ gauge)—

Details of construction—

The railway is 25·38 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak.

Ballast.—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2″ gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Terms of contract—

The line is worked under the following contract :—

Contract of—4th October 1904 (between the Secretary of State and the Madras Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows :—

Government aid.—The line is the property of the State.

Currency of contract.—The contract is to continue in force till the 31st December 1907 but may be terminated after twelve months' notice on the 1st April of any year.

Terms of working.—The working expenses are to include per half-year any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year; a sum not exceeding Rs. 40 for every mile of open line for Government supervision and control; the Company to charge for working and maintenance the same proportion of gross earnings which the working expenses of the whole system including this line bear to the gross earnings of that system, provided that such share shall in no case be less than an average sum of Rs. 35 per mile per week. The balance of the gross earnings to belong to Government.

Rates and fares.—Government exercise full control over rates and fares.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1905	10,63,690	12,840	—1,067	...	18,802	—19,869	34	108·31

6 (*g*) Azhikal-Mangalore railway (5′ 6″ gauge)—

Details of construction—

The railway is 77·27 miles long. It was sanctioned in 1901 and is under construction.

6 (*h*) Salem-Attur railway (5′ 6″ gauge)—

Details of construction—

The railway is 36·06 miles long. It was sanctioned in 1903 as a famine feeder line; but the commencement of work has not yet been authorised.

6 (*i*) Morappur-Dharmapuri railway (2′ 6″ gauge)—

Details of construction—

The railway is 18·14 miles long. It was sanctioned in 1902 as a famine feeder line and was opened in January 1906.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 7}{\text{Sub-head } (a)}$. **NAGDA-MUTTRA RAILWAY** (5′ 6″ gauge)—

Details of construction—

This railway, from Nagda to Muttra, is under construction by the State. It will be 343·98 miles long. Sanction to its construction was given in 1905.

Number $\frac{\text{Main head } 8}{\text{Sub-heads } (a) \text{ to } (c)}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—**

Lines comprising the system.—The Nizam's Guaranteed State railway system is made up of—

	Open line. Miles.
(*a*) Nizam's Guaranteed State railway (5′ 6″ gauge)	330·14
(*b*) Bezwada Extension railway (5′ 6″ gauge)	20·58
(*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)	391·13
Total	741·85

Running powers—

Home line over foreign line:—

Distant signal at Bezwada to Bezwada station, Madras (North-East line), for passenger and goods trains	0·89

Up to the end of 1878 the line was worked by the Great Indian Peninsula Railway Company with its own rolling-stock. From January 1879 to the 31st December 1884 it was worked by State agency, and from January 1885 by His Highness the Nizam's Guaranteed State Railways Company. The section of the East Coast (State) railway, which extends from the frontier of His Highness the Nizam's dominions to the north distant signal of the Bezwada station, was worked by this Company as part of its own system up to December 1897, when it was transferred to the East Coast (State) railway. It was transferred back to the Company for working from the 1st January 1901.

8 (*a*) Nizam's Guaranteed State railway proper (5′ 6″ gauge)—

Details of construction—

The open mileage of the Nizam's Guaranteed State railway proper is 330·14 miles, which may be divided into main line (Wadi junction to the British frontier), 310·10 miles, and branches, 20·04 miles. Its construction was first sanctioned in 1871 and it was opened through in 1889.

Permanent-way.—The first 47 miles from Wadi are laid with 75-lb. bull-headed steel rails on cast iron pot sleepers and the following 9 miles with 68-lb. double-headed steel rails on cast iron pot sleepers. The remainder of the line is laid with 66½-lb. flat-footed steel rails on steel pea-pod sleepers, with the exception of the mixed (5′ 6″ and 3′ 3⅜″) gauge line from Secunderabad to Hyderabad which has wooden sleepers under the same section of rail.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced from Wadi to Secunderabad, but from Secunderabad to the frontier only the station-yards are fenced.

Curves.—The sharpest curve is of 1,300 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract:—

Contract of—27th December 1883 (between the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Terms of contract.—The Nizam's Guaranteed State Railways Company was formed in 1883 for the purpose of acquiring and working the then existing railway and of constructing on the same gauge and working certain new lines, with a capital not exceeding £4,500,000 to be raised by the issue of shares and redeemable mortgage debentures (or as may be agreed upon), His Highness the Nizam's Government paying thereon for 20 years an annuity to be applied in payment of interest and towards a sinking fund for the redemption or reduction of capital. Land was provided free of charge.

Note.—The guarantee of His Highness the Nizam's Government on the share capital of £2,000,000 and £241,600 four per cent. debentures expired on the 25th June 1904.

Currency of contract.—The contract is current for a period of 99 years, and, on expiry by effluxion of time, the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The Nizam's Government has the option of purchasing the line on the 1st January 1914, 1934 or 1954, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon. In case of breach of contract by the Company the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Terms of working.—From gross earnings are deducted working expenses, and during the guaranteed period the net earnings are applied in the first instance to repayment of the annuity paid in the same half-year. Of the residue one moiety is utilised towards the repayment of previous payments of annuity and sums owing to the Nizam's Government, and the balance is paid to the Company. After the expiration of the annuity, a sum sufficient for payment of interest on the capital unredeemed will be retained by the Company, and of the balance one-half will be paid to the Nizam's Government, the remaining half being made over to the Company.

Rates and fares.—The rates and fares not to be, unless otherwise agreed between His Highness' Government and the Company, in excess of the rates and fares which were in existence on the Great Indian Peninsula railway at the time the contract was made.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 8}}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM**—*contd.*

8 (*a*) Nizam's Guaranteed State railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Table II. (Includes Bezwada Extension.) Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	1,16,46,997	6,94,401	89,925	0·77	110	87·01
1880	1,21,90,870	7,02,716	2,48,604	2·04	112	68·08
1881	1,22,85,291	7,56,834	2,88,666	2·35	120	61·32
1882	1,22,27,794	8,59,418	3,75,099	3·07	141	56·35
1883	1,22,83,560	8,53,521	2,37,932	1·94	137	72·12
1884	1,23,08,720	9,72,917	4,70,227	3·82	155	63·02
1885	2,05,60,998	11,13,950	4,87,024	2·37	178	56·26
1886	2,71,49,342	13,81,077	6,94,524	2·56	143	49·71
1887	2,99,71,143	15,48,891	5,52,905	2·05	143	64·31
1888	3,55,11,854	17,76,075	7,57,467	2·13	118	57·35
1889	3,59,46,922	22,57,462	7,72,513	2·15	129	66·90
1890	3,77,11,194	25,07,268	10,39,590	2·76	140	59·74
1891	3,95,18,791	27,76,437	12,57,860	3·18	151	54·70
1892	3,95,48,295	27,80,642	13,24,959	3·35	151	52·35
1893	4,01,96,909	30,61,605	14,36,451	3·57	186	53·08
1894	4,02,33,826	32,56,885	16,22,028	4·03	177	50·20
1895	4,06,43,818	32,15,541	15,77,149	3·88	185	53·77
1896	4,08,24,737	33,03,522	17,28,196	4·24	187	50·02
1897	4,09,60,944	36,10,354	19,38,769	4·73	205	48·67
1898	4,10,54,449	39,07,612	22,74,580	5·54	221	44·20
1899	4,15,68,731	41,10,201	25,01,046	6·02	240	43·45
1900	4,17,49,124	49,12,056	28,41,985	6·81	286	41·52
1901	4,24,30,543	40,77,927	26,48,120	6·24	236	35·59
1902	4,28,89,527	44,06,494	26,82,533	6·25	254	39·89
1903	4,30,13,663	43,18,630	25,38,386	5·90	251	41·79
1904	4,32,66,412	43,32,440	27,90,690	6·47	252	36·18
1905	4,35,86,043	42,78,161	28,49,703	6·54	251	33·28

8 (*b*) Bezwada Extension railway (5′ 6″ gauge)—

Details of construction—

This railway is 20·58 miles long and extends from the Hyderabad frontier to Bezwada. Its construction was sanctioned in 1886 and it was opened in 1889.

Permanent-way.—The line is laid with 66½-lb. flat-footed steel rails chiefly on steel pea-pod sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced at stations only.

Curves.—There are no curves with a radius of less than 1,900 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The line is maintained and worked for the same percentage of its gross earnings as the aggregate working expenses of the amalgamated undertaking of the 5′ 6″ gauge system bear to the aggregate gross earnings for the same half-year, *plus* 5 per cent. of the gross earnings of the Bezwada extension railway for the use of rolling-stock, and the cost of Government Audit establishment, and interest on joint works at Bezwada.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on Capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1887	8,11,654	...	...	...	16,363	—16,363		
1888	11,56,237	...	...	...	39,357	—39,357		
1889	13,46,302	76,671	16,326	1·21	53,530	—37,204		
1890	13,90,880	74,731	16,318	1·17	54,530	—38,212		
1891	14,11,077	87,367	28,699	2·03	56,266	—27,567		
1892	14,17,674	98,779	28,347	2·00	56,584	—28,237	Included with the Nizam's Guaranteed State railway proper.	
1893	14,21,456	1,08,386	33,972	2·39	56,888	—22,916		
1894	14,26,901	1,71,016	71,270	5·00	57,122	+14,148		
1895	14,31,642	95,119	95,119	6·64	57,239	+37,880		
1896	14,35,588	73,057	38,496	2·68	57,406	—18,910		
1897	14,95,418	1,66,800	56,645	3·79	58,383	—1,738		
1898	15,01,343	1,69,061	95,390	6·35	59,569	+35,821		
1899	15,02,651	3,12,172	1,84,365	12·27	60,101	+1,24,264		
1900	15,02,618	3,56,446	2,38,989	15·90	60,106	+1,78,883		
1901	11,51,678	2,77,177	1,56,929	13·63	35,509	+1,21,420		
1902	11,60,425	2,99,663	1,40,329	12·08	46,375	+93,954		
1903	11,77,047	3,25,363	1,67,732	14·22	46,617	+1,20,715		
1904	11,75,731	2,93,153	1,53,338	13·04	46,898	+1,06,460		
1905	11,78,645	3,47,490	2,04,239	17·33	47,046	+1,57,193		

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 8}{\text{Sub-heads (a) to (c)}}$. **NIZAM'S GUARANTEED STATE RAILWAY SYSTEM—*concld.***

8 (*c*) Hyderabad-Godavari Valley railway (3′ 3⅜″ gauge)—

Details of construction—

This railway connects Manmad with Hyderabad and is 391·13 miles long. Its construction was sanctioned in 1897 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails on steel pea-pod and wooden sleepers from mile 302 to 363 and wooden sleepers only for the remainder.

Ballast.—The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced from mile 377¼ to 381 and at all stations.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 133·3.

Terms of contract—

The railway is worked under the following agreement :—

Agreement of—16th March 1897 (between His Highness the Nizam's Government and the Nizam's Guaranteed State Railways Company) for construction and working.

The general conditions of the agreement are as follows :—

Terms of contract:—Capital to the extent of £2,500,000 to be raised by the issue of redeemable mortgage debentures, the Nizam's Government paying thereon an annuity, and, in addition, a sum of one per cent. per annum for 20 years towards a sinking fund for the redemption of such debentures which will be a first charge on the Hyderabad-Godavari Valley railway and a second charge on the Nizam's Guaranteed State railway; after the expiration of the guaranteed period the interest payable thereon to be a first charge on the net earnings of the former line and a second charge on the surplus net earnings of the latter line after the service of the existing debenture debt has been provided for. The free use of land is provided for.

Currency of contract.—On expiry of the contract by effluxion of time the land, buildings and fixed works, etc., and all rolling-stock, stores, etc., at a fair valuation, revert to the Nizam's Government. The contract runs concurrently with that of the Nizam's Guaranteed State Railways Company, and the Nizam's Government has the option of purchasing the line on the 1st January 1914, on twelve months' notice, by paying in sterling the capital unredeemed and a bonus of 25 per cent. thereon, or on the 1st January 1934 or 1954 without bonus. In case of breach of contract by the Company, the Nizam's Government may give six months' notice and assume possession of the line, etc., by paying the amount of capital unredeemed, unless the default or breach is remedied within that period.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings are deducted working expenses, and the net earnings are applied in the first instance towards replacing the amount paid as interest on capital during construction, and during the guaranteed period to repayment of the annuity paid in same half-year, and not more than half the residue to repayment of previous payments of annuity, the remaining moiety being added to and dealt with as part of the net earnings of the Company in respect of the Nizam's Guaranteed State railway. After expiration of the annuity a sum sufficient for payment of interest on the capital unredeemed to be retained by the Company, and of the balance one-half to be paid to the Nizam's Government the remaining moiety being dealt with as above.

Rates and fares.—Rates and fares not to be in excess of those prevailing on the Nizam's Guaranteed State railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Pro : of exp : to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	3,74,350	...	...	...	...	...
1897	17,64,352	...	...	...	...	...
1898	86,55,416	...	...	...	...	...
1899	2,00,21,971	63,381	36,877	0·18	48	41·82
1900	2,31,94,817	10,63,023	4,20,826	1·81	70	60·41
1901	2,44,37,419	20,10,033	9,23,300	3·77	99	54·07
1902	2,57,75,220	22,88,043	9,67,892	3·76	112	57·70
1903	2,62,07,241	22,14,752	8,86,291	3·38	109	59·98
1904	2,64,85,096	22,11,781	7,74,804	2·93	109	64·97
1905	2,68,15,349	29,64,122	13,29,009	4·97	146	55·16

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

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Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (l)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—**

Lines comprising the system.—The North Western (State) railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) North Western (State) railway (5′ 6″ gauge)	3,288·85	181·49	3,450·3
(*b*) Jammu and Kashmir (Native state section) (5′ 6″ gauge)	15·98	...	15·98
(*c*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)	78·66	...	78·66
(*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)	107·05	...	107·05
(*e*) Southern Punjab railway (5′ 6″ gauge)	425·33	...	425·33
(*f*) Southern Punjab "Ludhiana" Extension railway (5′ 6″ gauge)	77·05	77·45	155·12
(*g*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)	91·73	...	91·73
(*h*) Nowshera-Durgai railway (2′ 6″ gauge)	40·25	...	40·25
(*i*) Dandot Light railway (2′ 0″ gauge)	6·18	...	6·18
(*j*) *Amritsar-Patti railway (5′ 6″ gauge)*	...	26·85	26·85
(*k*) *Jullundur-Kapurthalla-Sultanpur (British section)* — Gauge not yet finally settled.	...	6·80	6·80
(*l*) *Jullundur-Kapurthalla-Sultanpur (Native state section).* — Gauge not yet finally settled.	...	22·02	22·02
Total	4,111·08	314·61	4,425·69

Running powers—

	Miles.
Home line over foreign line:—	
East Indian railway, Ghaziabad to Delhi, for passenger and goods trains	13·00

9 (*a*) North Western (State) railway proper (5′ 6″ gauge)—

Details of construction—

The open mileage of the North Western (State) railway proper is 3,268·85 miles, of which 168·36 miles are double line. This may be divided into (*1*) *the Commercial section*, main line (Ghaziabad to Peshawar and Lahore to Karachi), 1,444·70 miles, and branches, 699·58 miles; (*2*) *Military section, Sind Sagar*, main line (Lala Musa to Sher-Shah), 344·59 miles, and branches, 227·14 miles; (*3*) *Military section, Sind Pishin* (Ruk to Chaman), 336·03 miles; (*4*) *Military section, Mushkaf-Bolan*, main line (Sibi to Quetta), 86·74 miles, and branches, 35·74 miles; (*5*) *Military section, Quetta-Nushki* (Spezand Junction to Nushki), 83·29 miles; and (*5*) *Peshawar-Jamrood branch*, 11·04 miles. The first sanction to the main line of this railway was given in 1859. It was opened through to Peshawar in 1883 and from Lahore to Karachi in 1889.

There are 181·49 miles of single and 239·16 miles of double line under construction.

Permanent-way.—The permanent-way is of various types. On the single line, of iron rails there are 60-lb. flat-footed, 68-lb. double-headed, 60-lb. bull-headed, 82-lb. double-headed and 68-lb. bull-headed; of steel rails there are 70-lb. flat-footed, 62-lb. flat-footed, 75-lb. flat-footed, 64-lb. double-headed, 68-lb. double-headed, 75-lb. double-headed, 68-lb. bull-headed, 84-lb. bull-headed, 100-lb. flat-footed, 77½-lb. bull-headed, 73-lb. bull-headed and 85-lb. bull-headed. On the double line, of iron rails there are 68-lb. double-headed; of steel rails there are 68-lb. double-headed, 75-lb. flat-footed, 77½-lb. bull-headed and 100-lb. flat-footed. The sleepers used are chiefly of wood, but cast-iron (oval or round) pots and steel transverse sleepers are also extensively used.

Ballast.—The line is ballasted throughout with sand, bricks and broken stone.

Fencing.—The line is fenced from Karachi to Ghaziabad, Ruk to Jhatpat and Lahore to Lala Musa. The line between Lala Musa and Peshawar is partially fenced.

Curves.—The sharpest curve is of 408 feet radius.

Gradients.—The ruling gradient between Kotri and Rohri, and Sibi and Ruk is 1 in 500; between Ghaziabad and Lala Musa, and Kotri and Lahore, 1 in 400; between Karachi and Kotri, 1 in 189; and between Lala Musa and Peshawar, 1 in 100. The ruling gradients on the Sind-Sagar, Mari-Attock, Sind-Pishin and Mushkaf-Bolan lines are 1 in 400, 1 in 80, 1 in 40 and 1 in 25, respectively.

Terms of contracts—

The line is owned and worked by the State.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads } (a) \text{ to } (l)}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM**—*contd.*

9 (*a*) North Western (State) railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

TABLE I.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Annuity.	Surplus profits paid to Company.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1879 .	21,67,61,247	1,51,27,621	55,35,870	2·55	1,06,29,015	...	...	−44,92,145
1880 .	25,05,35,401	1,90,30,666	75,55,561	3·02	1,11,36,919	...	21,122	−36,02,480
1881 .	26,38,29,396	90,04,725	46,13,547	1·75	1,17,64,868	...	...	−71,51,321
1882 .	27,49,44,870	82,43,072	57,96,011	2·11	1,05,83,712	...	...	−47,87,701
1883 .	28,18,15,808	1,03,81,148	87,19,243	3·09	1,07,43,931	...	...	−20,24,688
1884 .	29,20,27,775	1,07,68,748	88,21,631	3·02	1,18,26,701	...	...	−30,05,070
1885 .	31,69,43,458	1,49,78,983	1,37,44,127	4·34	1,64,98,697	...	1,25,953	−28,80,523
1886 .	33,88,68,533	2,53,60,901	1,19,02,839	3·54	1,14,07,148	53,00,733	...	−47,15,042
1887 .	36,16,49,700	2,10,03,388	57,77,585	1·60	1,01,56,779	88,30,322	...	−1,32,09,516
1888 .	37,50,58,823	2,67,79,305	83,63,598	2·23	1,09,18,939	83,45,756	...	−1,08,98,096
1889 .	38,73,09,431	2,82,06,820	1,02,84,741	2·66	1,13,76,516	83,98,768	...	−94,90,543
1890 .	41,54,67,150	2,73,99,035	1,03,57,601	2·47	1,16,66,585	74,54,323	...	−88,63,307
1891 .	41,87,30,971	3,25,78,355	1,21,32,521	2·90	1,20,67,542	80,05,299	...	−79,40,321
1892 .	42,71,90,670	2,64,35,665	94,50,960	2·21	1,24,28,030	89,84,076	...	−1,19,59,146
1893 .	43,71,03,581	2,92,68,732	97,97,643	2·24	1,27,61,682	90,98,545	...	−1,20,62,584
1894 .	44,78,05,925	3,23,14,097	1,28,35,181	2·86	1,24,63,279	1,03,59,245	...	−99,97,343
1895 .	46,28,14,462	3,52,18,382	1,64,46,998	3·55	1,35,01,193	1,03,17,385	...	−73,71,580
1896 .	47,81,90,892	2,94,41,749	1,18,86,409	2·49	1,42,35,427	96,43,538	...	−1,19,92,606
1897 .	48,79,25,236	3,29,03,448	1,49,78,897	3·07	1,45,85,298	90,50,191	...	−86,56,592
1898 .	49,37,11,919	3,76,01,912	1,85,74,360	3·76	1,50,41,459	86,35,840	...	−51,02,946
1899 .	50,01,64,031	3,53,21,759	1,60,89,223	3·22	1,50,40,208	85,61,406	...	−75,12,391
1900 .	50,57,26,113	3,15,22,237	1,32,19,151	2·61	1,54,25,164	85,76,682	...	−1,07,82,695
1901 .	51,04,27,448	4,11,89,277	2,03,56,471	3·99	1,55,50,694	86,02,322	...	−37,96,445
1902 .	52,53,16,084	4,22,19,927	1,73,70,994	3·31	1,59,69,560	85,81,455	...	−71,80,921
1903 .	53,31,87,631	4,93,83,876	2,50,08,517	4·69	1,62,88,103	85,77,430	...	+1,42,984
1904 .	54,52,39,823	6,16,56,310	3,22,92,909	5·92	1,67,34,700	85,77,430	...	+69,80,779
1905 .	57,66,34,021	5,86,74,949	2,96,52,393	5·04	1,72,13,261	85,61,692	...	+32,76,732

TABLE II.

Calendar year.	Sind-Punjab and Delhi, 5′ 6″.		Punjab-Northern, 5′ 6″.		Indus Valley and Kandahar, 5′ 6″.		Amritsar-Pathankot, 5′ 6″.		*North Western (State).* Commercial section.		Military section.		Entire line.	
	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.	Earnings per mile per week.	Pro: of exp: to earnings.
	Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	
1861	58	97·28	...	...	...	...	...	...	...	...	...	...	...	...
1862	112	79·59	...	...	...	...	...	...	...	...	...	...	...	...
1863	171	83·04	...	...	...	...	...	...	...	...	...	...	...	...
1864	170	87·28	...	...	...	...	...	...	...	...	...	...	...	...
1865	101	82·18	...	...	...	...	...	...	...	...	...	...	...	...
1866	116	76·15	...	...	...	...	...	...	...	...	...	...	...	...
1867	121	89·93	...	...	...	...	...	...	...	...	...	...	...	...
1868	112	95·69	...	...	...	...	...	...	...	...	...	...	...	...
1869	117	80·70	...	...	...	...	...	...	...	...	...	...	...	...
1870	140	76·16	...	...	...	...	...	...	...	...	...	...	...	...
1871	122	99·09	...	...	...	...	...	...	...	...	...	...	...	...
1872	134	85·77	...	...	...	...	...	...	...	...	...	...	...	...
1873	154	68·67	...	...	...	...	...	...	...	...	...	...	...	...
1874	101	55·35	...	...	...	...	...	...	...	...	...	...	...	...
1875	161	64·08	61	63·41	...	...	...	...	...	...	...	...	...	...
1876	186	67·03	101	77·27	...	...	...	...	...	...	...	...	...	...
1877	241	57·46	130	86·61	...	...	...	...	...	...	...	...	...	...
1878	234	64·50	169	99·36	56	122·97	...	...	...	...	...	...	...	...
1879	317	60·22	345	79·53	121	81·16	...	...	...	...	...	...	...	...
1880	352	55·92	360	83·25	209	71·15	...	...	...	...	...	...	...	...
1881	285	69·76	198	89·64	155	78·73	...	...	...	...	...	...	...	...
1882	285	66·00	151	83·74	141	69·17	...	...	...	...	...	...	...	...
1883	296	57·13	144	81·11	203	55·55	...	...	...	...	...	...	...	...
1884	290	61·26	139	72·34	210	69·49	67	85·78	...	...	...	...	...	...
1885	373	57·35	165	62·69	309	40·85	84	80·28	...	...	...	...	...	...
1886	...	...	...	...	...	...	...	...	...	...	...	...	261	52·49
1887	...	...	...	...	...	...	...	...	...	...	...	...	183	72·33
1888	...	...	...	...	...	...	...	...	...	...	...	...	202	67·37
1889	...	...	...	...	...	...	...	...	290	56·53	89	107·75	224	63·35
1890	...	...	...	...	...	...	...	...	283	54·95	89	110·72	219	62·36
1891	...	...	...	...	...	...	...	...	341	55·60	89	122·41	261	62·99
1892	...	...	...	...	...	...	...	...	280	55·58	70	131·09	206	64·25
1893	...	...	...	...	...	...	...	...	313	60·20	69	122·71	230	66·53
1894	...	...	...	...	...	...	...	...	347	53·11	76	122·95	253	60·51
1895	...	...	...	...	...	...	...	...	379	49·79	75	116·14	274	53·30
1896	...	...	...	...	...	...	...	...	292	54·68	75	97·77	220	59·55
1897	...	...	...	...	...	...	...	...	302	49·70	72	93·76	225	54·39
1898	...	...	...	...	...	...	...	...	354	45·98	63	101·26	256	50·60
1899	...	...	...	...	...	...	...	...	326	47·73	58	123·43	232	54·32
1900	...	...	...	...	...	...	...	...	275	53·34	60	107·61	202	58·02
1901	...	...	...	...	...	...	...	...	350	45·41	69	99·55	255	50·32
1902	...	...	...	...	...	...	...	...	360	53·63	67	116·42	262	59·62
1903	...	...	...	...	...	...	...	...	421	44·42	65	106·94	294	49·36
1904	...	...	...	...	...	...	...	...	519	42·29	75	113·47	361	47·60
1905	...	...	...	...	...	...	...	...	493	46·65	75	94·82	338	50·46

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (i)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

9. (*b*) Jammu and Kashmir (Native State section) (5′ 6″ gauge)—

Details of construction—

This line, which extends from the Kashmir frontier to the left bank of the Tawi river near Jammu, is 15·98 miles long. Its construction was sanctioned in 1888 and it was opened in 1890.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced except at Sialkot station.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Terms of contracts—

The railway is worked by the State under the following agreement :—

Agreement—having effect from 1st January 1903 (between the Government of India and the Kashmir Durbar) for construction and working.

The general conditions of the agreement are as follows :—

Government aid.—Government allow this railway in addition to 44·5 per cent. of the gross earnings of the Tawi-Suchetgarh section a rebate payment on interchanged traffic to the extent necessary to give the Durbar a total dividend of 3½ per cent. per annum on the actual expenditure to the end of the half-year concerned as entered in rupees in the capital account of the said railway—subject to a maximum limit equal to the net earnings of the North Western (State) railway from traffic interchanged with this section.

Currency of agreement.—The agreement is current for a period of five years from 1st January 1903 and is terminable thereafter on six months' notice by either side.

Terms of working.—The North Western (State) railway work and maintain the line for 55·5 per cent. of its gross earnings, which includes hire of locomotives and rolling stock necessary and cost of such new minor works as are usually charged to revenue on the North Western (State) railway, subject to a limit of Rs. 30 per mile per annum. The cost of additional works usually charged to capital to be found by the Durbar, no charge being made by the North Western (State) railway for supervision of the construction of such capital works except where special establishment is required.

Rates and fares.—Rates and fares are those which are from time to time in force on the main line of the North Western (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Percentage on total income	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1888	29,545	...	...	...	...	...	...	...	...
1889	7,51,458	...	...	...	...	...	...	...	...
1890	12,37,071	45,667	13,770	1·11	...	...	...		
1891	13,80,083	37,312	15,904	1·15	...	...	...		
1892	9,45,302	41,718	15,444	1·63	...	...	...		
1893	9,56,327	54,637	14,332	1·50	...	...	...		
1894	9,59,773	60,463	17,555	1·83	...	...	...	Included with the North Western (State) railway.	
1895	9,60,010	56,239	25,026	2·60	...	...	...		
1896	9,60,011	55,185	24,558	2·55	...	...	...		
1897	9,65,151	48,509	21,587	2·24	...	...	...		
1898	9,62,846	48,164	21,483	2·23	...	...	...		
1899	9,60,820	51,532	22,932	2·39	...	...	...	58	55·50
1900	9,60,492	55,215	24,571	2·56	...	...	...	62	55·50
1901	9,60,636	52,484	23,355	2·43	...	...	...	67	55 50
1902	9,62,471	51,865	23,060	2·40	...	...	...	63	55·50
1903	9,62,284	54,881	24,422	2·54	2,258	33,680	3·50	63	55·50
1904	9,62,208	56,231	25,023	2·60	8,655	33,678	3·50	66	55·50
1905	9,62,208	66,842	29,745	3·09	4,540	34,285	3 57	68	55·50
								80	55·50

9. (*c*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)—

Details of construction—

This railway is 78·66 miles long. Its construction was sanctioned in 1899 and it was opened in 1901.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only the station yards and about 100 feet each side of level crossings are fenced.

Curves.—The sharpest curve is of 1,364 feet radius.

Gradients.—The ruling gradient is 1 in 400.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (l)}}$ **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

9. (*c*) Ludhiana-Dhuri-Jakhal railway (5′ 6″ gauge)—*concld.*

Terms of contract—

The railway is worked under the contract of 6th September 1899 (between the Secretary of State and the Maler Kotla and Jind Durbars) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—The line was constructed at the cost of the Maler Kotla and Jind Durbars.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract the North Western (State) railway will give to the Maler Kotla and Jind Durbars possession of the railway, works, surveys and stores, and, on this being done, the Maler Kotla and Jind Durbars will indemnify the North Western (State) railway from all debts and liabilities incurred for the Ludhiana-Dhuri-Jakhal railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—After deduction of 55 per cent. of the gross receipts for working expenses, the balance is paid to the Maler Kotla and Jind Durbars to be divided between them in the proportion of $\frac{1}{4}$th and $\frac{3}{4}$ths, respectively.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.		
1901	43,10,407	2,02,297	91,034	2·11	68	55·00	The decrease in Capital outlay in 1903 was due to credits.
1902	43,24,799	4,05,005	1,82,252	4·21	99	55·00	
1903	41,19,964	3,15,026	1,41,762	3·44	77	55·00	
1904	41,19,634	3,46,059	1,55,727	3·78	85	55·00	
1905	41,22,517	5,15,007	2,31,753	5·62	126	55·00	

9. (*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)—

Details of construction—

This railway is 107·05 miles long. Its construction was first sanctioned in 1883 and it was opened through in 1889.

Permanent-way.—The line from Rajpura to Patiala is laid with 68-lb. bull-headed steel rails on deodar sleepers and from Patiala to Bhatinda with 75-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—The line is fenced between Rajpura and Patiala and at station yards and 100 feet on each side of level crossings between Patiala and Bhatinda.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Terms of contract—

The railway is owned by the Patiala State and is worked by the North Western (State) railway under the following :—

Contract of—30th January 1893 (between the Secretary of State and the Patiala Durbar) for maintenance and working.

Government of India letter No. 817 R. T. of 5th October 1903, sanctioning the reduction in the percentage of gross earnings to be retained by North Western (State) railway for working, from 55 to 52, with effect from 1st January 1904.

The general conditions of the contract are as follows :—

Government aid.—The line has been constructed at the cost of the Patiala Durbar.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. On breach of any of the provisions of the contract, if not remedied within six months of notice, the Secretary of State may determine the contract. Upon the determination of the contract, the North Western (State) railway will give to the Patiala Durbar possession of the railway, works, surveys and stores, and, on this being done, the Patiala Durbar will indemnify the North Western (State) railway from all debts and liabilities incurred for the Rajpura-Bhatinda railway then subsisting. The working stores provided by the North Western (State) railway may, if desired by that railway, be taken over at a valuation to be mutually agreed upon.

Terms of working.—55 per cent. of the gross earnings to end of 1903 and 52 per cent. thereafter.

Rates and fares.—Rates and fares as in force on the North Western (State) railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (i)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM—*contd.***

9. (*d*) Rajpura-Bhatinda railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.a	
1884	11,12,259	5,111	—496	...	17	109·73
1885	12,29,141	48,769	—4,255	...	59	106·09
1886	12,29,141	64,623	13,816	1·12	78	78·62
1887	12,43,250	Not available	15,425	1·24	Included with North Western (State) railway.	
1888	22,61,990		18,640	0·82		
1889	62,83,918	1,06,480	58,403	0·93	74	55·00
1890	65,00,534	5,66,946	2,55,126	3·99	101	55·00
1891	65,31,553	7,19,859	3,23,937	4·92	128	55·00
1892	66,41,382	5,64,053	2,53,824	3·82	100	55·00
1893	67,26,941	6,84,947	3,07,956	4·58	122	55·00
1894	67,01,669	12,59,032	5,66,565	8·45	224	55·00
1895	67,02,457	13,18,902	5,93,506	8·86	235	55·00
1896	66,95,813	9,97,826	4,49,022	6·71	178	55·00
1897	66,96,451	6,96,927	3,13,617	4·68	124	55·00
1898	67,04,520	7,02,637	3,16,187	4·72	125	55·00
1899	67,05,785	6,79,520	3,05,784	4·56	122	55·00
1900	67,05,785	6,93,804	3,12,211	4·66	125	55·00
1901	67,10,823	8,60,642	3,87,289	5·77	155	55·00
1902	67,12,977	8,40,947	3,78,426	5·64	151	55·00
1903	67,18,890	9,64,002	4,33,801	6·46	173	55·00
1904	67,23,431	10,67,925	5,12,604	7·62	192	52·00
1905	67,18,831	12,53,390	6,01,628	8·95	225	52·00

9. (*e*) Southern Punjab railway (5′ 6″ gauge)—

The railway runs from Delhi, *viâ* Bhatinda, to Samasata on the North Western (State) railway, shortening the distance by railway between Delhi and Karachi by 187 miles as compared with the route *viâ* Umballa and Lahore.

Details of construction—

The open mileage amounts to 425·33 miles, which may be divided into main line (Delhi to Samasata), 401·95 miles, and branch, 23·38 miles. The main line was opened through in 1897.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on transverse sleepers of creosoted pine and deodar.

Ballast.—The line is ballasted throughout with broken brick.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve is of 2,100 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contracts—

The railway is worked under the following contracts :—

Contract of—13th August 1895 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working.

4th May 1899 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Narwana-Kaithal branch.

4th October 1905 (between the Secretary of State and the Southern Punjab Railway Company) for construction and working of the Southern Punjab "Ludhiana" extension, 9 (*f*).

The general conditions of the contracts are as follows :—

Government aid.—Government allow the Company in respect of each half-year, by way of rebate on the net earnings of the North Western (State) railway from traffic interchanged with the Southern Punjab railway and from through traffic between stations of the North Western (State) railway sent over the Southern Punjab railway, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the Company's net earnings, make up an amount equal to interest for the year at the rate of 3½ per cent. on the actual rupee expenditure charged in the capital account. Land was provided free of cost to the Company.

Currency of contract.—Government may, by giving twelve months' notice, determine the contract on the 31st December 1923, or at the expiration of any subsequent period of ten years, paying to the Company in sterling a sum equal to 25 times the average of the Company's share of the net earnings of the railway during the last preceding five years, not exceeding by more than 20 per cent. the total capital expenditure of the Company in sterling, nor being less than such capital expenditure. Government may also determine the contract on the 31st December 1948, paying to the Company in sterling a sum equal to the total capital expenditure in sterling.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 9}{\text{Sub-heads } (a) \text{ to } (l)}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM**—*contd.*

9. (*e*) Southern Punjab railway (5′ 6″ gauge)—*concld.*

Terms of contracts—*concld.*

Power of Company to surrender contract.—Nil.

Terms of working.—Government undertake to work and maintain the line and provide rolling-stock at 52 per cent. of the gross earnings. Surplus profits in excess of 3¾ per cent. per annum on the total capital expenditure in sterling are divisible equally at the close of each year between the Government and the Company. The North Western (State) railway take all receipts from traffic between its own stations including Delhi and Samasata, but excluding the Patiala State railway, which passes over the Southern Punjab railway. The Company, in addition to its earnings from local and interchanged traffic, receives, where it forms part of the shortest route, its mileage proportion of traffic between the North Western (State) railway and foreign lines.

Rates and fares.—Rates and fares to be fixed by Government within the maxima and minima rates and fares in force on the North Western (State) railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from N. W. (S.) ry.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1895 . .	21,49,441	...	...	...	...	...	...	...	...	Adjustments under the Cripps' award were brought into account in 1901, but in these statistics they have been adjusted and allocated to the proper years.
1896 . .	1,30,67,048	...	...	...	...	...	...	...	...	
1897 . .	1,99,08,812	1,61,038	77,298	0·39	19,942	97,240	0·49	52	52·00	
1898 . .	2,23,62,221	16,29,122	7,81,978	3·49	...	7,81,978	3·49	74	52·00	
1899 . .	2,26,68,262	16,11,010	7,73,285	3·41	17,318	7,90,603	3·49	73	52·00	
1900 . .	2,26,57,063	16,36,280	7,89,360	3·48	3,562	7,92,922	3·50	74	52·00	
1901 . .	2,25,70,734	24,96,333	11,98,240	5·31	...	11,98,240	5·31	113	52·00	
1902 . .	2,27,93,660	19,41,541	9,31,940	4·09	...	9,31,940	4·09	88	52·00	
1903 . .	2,28,27,906	21,59,158	10,36,396	4·54	...	10,36,396	4·54	98	52·00	
1904 . .	2,29,43,454	27,47,442	13,18,772	5·74	...	13,18,772	5·74	124	52·00	
1905 . .	2,30,13,696	36,40,372	17,47,379	7·59	...	17,47,379	7·59	165	52·00	

9. (*f*) Southern Punjab "Ludhiana" extension (5′ 6″ gauge)—

Details of construction—

The open mileage, from Ludhiana to Ferozepore, is 77·05 miles. It was sanctioned in 1903 and opened in 1905.

Besides the above there were 77·45 miles under construction at the close of the year.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on Australian jarrah wood sleepers.

Ballast.—The line is being ballasted chiefly with brick.

Fencing.—Only the station yards, and short lengths on either side of all level crossings where gates and gate lodges have been provided, are being fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

This railway is worked as a part of the Southern Punjab railway under the contracts and conditions relating to that railway [9 (*e*)], except as follows :—

Government aid.—Government allow the Company, by way of rebate, on the net earnings of the North Western (State) railway from traffic interchanged or sent over any part of the Company's lines including the Ludhiana extension, such a sum (not exceeding the amount of such net earnings of the North Western (State) railway) as together with the net earnings of the Company in respect of the Ludhiana extension will make up interest at the rate of 5 per cent. per annum on the capital expenditure of the Company in respect of the extension as charged in the capital account.

Currency of contract.—Concurrent with the contract contained in the Principal Indenture. If determined by notice of purchase on 31st December 1923 or at the expiration of any subsequent period of ten years there shall be paid to the Company a sum equal to twenty-five years' purchase of the average of the Company's share of the net earnings of the extension during the five years immediately preceding such 31st December; subject to a maximum limit of 20 per cent. of the total capital expenditure on the extension and a minimum of the total sterling capital expenditure of the extension. If determined by notice of purchase on 31st December 1948 then the total amount of such capital expenditure as aforesaid in sterling.

Terms of working.—Surplus profits in excess of 5 per cent. per annum on the total capital expenditure are divisible at the close of each year between the Company and the Secretary of State in the proportion of one-fourth to the former and three-fourths to the latter.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Rebate from North Western (State) railway.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1905 . . .	70,09,669	73,332	35,200	0·50	10,509	45,700	0·66	68	52·00

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads (a) to (l)}}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM**—*contd.*

9. (*g*) Khushalgarh-Kohat-Thal railway (2′ 6″ gauge)—

Details of construction—

The line is 91·73 miles long. Its construction was sanctioned in 1900 and it was opened through in 1903.

Permanent-way.—The permanent-way between Khushalgarh and Kohat consists of flat-footed steel rails, 35 lbs. to the yard, laid on wooden sleepers; the Kohat-Thal section is laid partly with 25-lb. and partly with 21-lb. rails, partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 239 feet radius.

Gradients.—The ruling gradient between Khushalgarh and Kohat is 1 in 83·3 and between Kohat and Thal 1 in 100.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working—

Table I.	Table II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
Included with the North Western (State) railway	1902	31	67·88
	1903	34	174·56
	1904	34	222·38
	1905	38	166·36

9. (*h*) Nowshera-Durgai railway (2′ 6″ gauge)—

Details of construction—

This railway is 40·25 miles in length. Its construction was sanctioned in 1899 and it was opened through in 1901.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid partly on wooden and partly on steel sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 477 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts.—The railway is owned and worked by the State.

Statistics of working—

Table I.	Table II.		
	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
		Rs.	
Included with the North Western (State) railway	1902	51	152·27
	1903	53	101·67
	1904	69	97·29
	1905	68	103·17

9. (*i*) Dandot Light railway (2′ 0″ gauge)—

The Dandot Light railway has been constructed by the North Western (State) railway to develop the Dandot colliery which is worked primarily for the benefit of the railway. The section from Dandot to the mouth of the main mine consists chiefly of two inclines worked with steel wire ropes by combined gravity and steam power. On the second portion (1·29 miles) there is another incline worked by gravity alone.

Details of construction—

The line is 6·18 miles long. The section from Dandot station to the mouth of the main mine was opened in 1889.

Permanent-way.—The permanent-way consists of old metre gauge 36-lb. and 40-lb. rails laid on deodar sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced.

Curves.—One semi-circular curve of a radius of 75 feet is used to enable the line to turn on itself.

Terms of contracts.—The line is owned and worked by the State.

Statistics of working.—Included with the North Western (State) railway.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 9}}{\text{Sub-heads } (a) \text{ to } (l)}$. **NORTH WESTERN (STATE) RAILWAY SYSTEM**—*concld.*

9. (*j*) Amritsar-Patti railway (5′ 6″ gauge)—

Details of construction—

This line, from Amritsar *viâ* Tarn Taran to Patti, will be 26·85 miles long. It was sanctioned in 1905 and is under construction.

9. (*k*) Jullundur-Kapurthalla-Sultanpur (British section)—

This line, which will be 6·80 miles long, has not yet been commenced, nor has the gauge been settled.

9. (*l*) Jullundur-Kapurthalla-Sultanpur (Native State section)—

The Native state section will be 22·02 miles long. The same remarks apply to it as are made against the British section.

Number $\frac{\text{Main head 10}}{\text{Sub-heads } (a) \text{ to } (c)}$. **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—**

Lines comprising the system.—The Oudh and Rohilkhand (State) railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Oudh and Rohilkhand (State) railway (5′ 6″ gauge)	1,163·24	57·50	1,220·74
(3′ 3⅜″ gauge)	1·81	...	1·81
(*b*) Hardwar-Dehra railway (5′ 6″ gauge)	32·04	...	32·04
(*c*) Cawnpore-Burhwal link (3′ 3⅜″ gauge)	79·60	...	79·60
Total	1,276·69	57·50	1,334·19

Running powers—

	Miles.
Home line over Foreign line :—	
Ghaziabad to Delhi, East Indian railway, granted for passenger and goods trains but exercised for the former only	13·00
Foreign lines over Home line :—	
Great Indian Peninsula railway at Cawnpore } granted for passenger and goods trains, but exercised for the former only. Cawnpore to Lucknow }	0·86 / 44·63
East Indian railway, Moghal Sarai to Benares Cantonment, for certain passenger trains only	10·00
	55·49
Bengal and North-Western railway, Cawnpore to Aishbagh, 45·03 miles, and Daliganj to Burhwal, 34·57 miles (Cawnpore-Burhwal link, 3′ 3⅜″ gauge) } for passenger and goods trains.	79·60
Benares Cantonment to Benares City (Oudh and Rohilkhand (State) railway, 3′ 3⅜″ gauge) }	1·81
	81·41

10. (*a*) Oudh and Rohilkhand (State) railway proper (5′ 6″ gauge)—

The Oudh and Rohilkhand railway was acquired by the State from the late guaranteed Company on the 1st January 1889.

A tramway constructed at the expense of Messrs. Carew and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand (State) railway. This tramway is 3·25 miles long and is worked by manual power. It is used for goods traffic only.

Details of construction.—

The total open mileage of the railway is 1,165·05 miles. This may be divided into (1) Main line (Moghal Sarai to Saharanpur), 518·49 miles ; (2) Benares-Lucknow loop, 199·03 miles ; (3) Bareilly-Moradabad loop, 70·50 miles ; and branches, 375·22 miles ; and 1·81 miles of 3′ 3⅜″ gauge at Benares.

First sanction to construction was given in 1864. The main line *viâ* Rai Bareilly was opened through in 1898. The Benares-Lucknow loop was opened through in 1874, and the Bareilly-Moradabad loop in 1873.

There are 57·50 miles under construction.

Permanent-way.—The main line and Benares-Lucknow loop are laid throughout with 75-lb. flat-footed steel rails. So are most of the branches, although some 60-lb. flat-footed steel rails are still to be found in a few of the branches, *e.g.*, the Aligarh branch and in a portion of the Bareilly-Moradabad loop. There are also a few miles of 60-lb. flat-footed iron rails in the Bahramghat and Madhoganj branches.

The sleepers are of the following types :—stamped steel bowls, cast-iron pots, steel trough transverse and wood (sâl, deodar, jarrah and New South Wales hard wood). There are a few wrought iron saddle back sleepers in the Kotdwara branch and Bareilly-Moradabad loop.

Ballast.—The main line is ballasted throughout with kunkur, stone, or shingle.

The branches are ballasted either with sand or earth with a covering of broken brick, kunkur or stone, except the Allahabad, Delhi and Cawnpore branches which are ballasted with kunkur, stone or shingle.

Fencing.—The line is fenced throughout with the exception of the Madhoganj, Meerut and Kotdwara branches.

Curves.—The sharpest curve on the line is of 1,000 feet radius.

Gradients.—The ruling gradient of the whole of the railway is 1 in 400.

Terms of contract—

The Oudh and Rohilkhand (State) railway is owned and worked by the State.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*contd.***

10 (*a*) Oudh and Rohilkhand (State) railway proper (5′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Surplus profits paid to Company.	Gain or loss to the State.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
1879	5,80,35,744	43,44,843	18,19,936	3·14	28,00,000	...	−9,80,064
1880	6,02,24,081	44,55,150	19,04,409	3·16	28,19,946	...	−9,15,537
1881	6,25,30,935	49,28,730	19,75,699	3·16	29,14,137	...	−9,38,438
1882	6,52,79,840	52,62,844	19,01,971	2·76	30,67,822	...	−12,66,351
1883	7,07,69,446	54,56,255	24,90,362	3·50	31,25,495	...	−6,55,133
1884	7,91,43,383	52,75,198	23,26,146	2·94	41,14,587	...	−17,88,441
1885	8,54,34,426	55,37,369	17,95,361	2·10	46,53,333	...	−28,57,972
1886	8,95,12,775	65,05,408	28,60,755	3·20	51,88,014	...	−23,27,259
1887	9,17,06,668	66,46,213	31,35,249	3·42	53,93,339	...	−22,63,090
1888	9,18,41,649	70,77,053	30,16,005	3·28	51,67,494	...	−21,51,489
1889	9,22,32,226	75,39,683	42,04,076	4·56	49,71,898	...	−7,67,822
1890	9,27,89,280	73,31,396	37,54,478	4·05	44,23,109	...	−6,68,631
1891	9,28,38,358	85,64,209	49,42,458	5·32	47,25,666	...	+2,16,792
1892	10,34,95,085	85,42,836	50,16,329	4·84	52,79,411	...	−2,63,082
1893	10,09,17,292	87,15,926	50,17,053	4·97	55,01,058	...	−4,84,005
1894	10,28,87,184	1,05,18,836	57,36,188	5·58	63,11,123	...	−5,74,935
1895	10,65,05,148	1,02,94,880	52,55,948	4·93	63,69,949	...	−11,14,001
1896	10,92,69,485	86,97,076	43,50,907	3·98	61,20,729	...	−17,70,822
1897	11,44,19,239	85,15,856	36,96,778	3·23	59,77,486	...	−22,80,708
1898	11,64,80,213	96,51,599	53,07,727	4·56	58,76,247	...	−5,68,520
1899	12,21,84,423	1,11,38,990	60,76,395	4·97	59,75,202	...	+1,01,193
1900	12,55,84,869	1,15,15,132	55,91,727	4·45	63,28,185	...	−6,36,458
1901	12,88,66,865	1,32,54,991	72,20,007	5·60	63,12,044	...	+9,07,963
1902	13,65,17,057	1,31,65,792	64,11,336	4·70	64,75,905	...	−64,569
1903	14,52,62,379	1,39,49,922	72,31,862	4·98	68,00,305	...	+4,31,557
1904	14,96,63,929	1,52,96,206	71,33,117	4·76	70,55,640	...	+77,477
1905	15,37,92,909	1,53,35,913	63,43,867	4·12	71,68,431	...	−8,24,764

TABLE II.

Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	
1867	74	106·97
1868	120	64·54
1869	97	81·74
1870	112	127·36
1871	117	69·31
1872	56	66·38
1873	56	72·91
1874	72	64·41
1875	97	59·71
1876	120	63·96
1877	153	53·38
1878	163	54·23
1879	153	58·11
1880	157	57·25
1881	173	59·91
1882	185	65·77
1883	192	54·54
1884	183	55·99
1885	176	65·50
1886	180	56·02
1887	186	52·83
1888	197	57·38
1889	209	44·24
1890	205	49·14
1891	238	42·29
1892	237	41·23
1893	239	42·44
1894	262	45·47
1895	248	48·95
1896	209	49·97
1897	166	56·89
1898	190	46·12
1899	208	45·45
1900	208	51·44
1901	231	45·53
1902	230	51·39
1903	226	48·16
1904	235	53·37
1905	238	58·77

10. (*b*) Hardwar-Dehra railway (5′ 6″ gauge)—

Details of construction—

This railway is 32·04 miles long. Its construction was sanctioned in 1896 and it was opened in 1900.

Permanent-way.—The permanent-way consists of 75-lb. flat-footed I. S. R. steel rails on deodar sleepers.

Ballast.—The line is ballasted throughout with shingle, with a covering of broken stone for boxing.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 75.

Terms of contract—

The Hardwar-Dehra railway is worked under the following contract :—

Contract of—26th March 1897 (between the Secretary of State and the Hardwar-Dehra Railway Company) for construction and working.

The general conditions of the contract are as follows :—

Government aid.—Interest at 3 per cent. per annum is guaranteed. Government also allow Rs. 3,600 for office and management expenses in any year in which the minimum dividend of 3 per cent. is not received by the Company from the earnings of the line, and pay all legal expenses properly debitable to revenue. Land is also provided free of charge.

Terms of contract.—The Hardwar-Dehra Railway Company is authorised to raise 30 lakhs of rupees as capital and, except for *bonâ fide* temporary purposes at a reasonable rate of interest, the Company cannot, without the sanction of Government or the working agency, increase its share or stock capital.

Currency of contract.—Government may determine the contract, on twelve months' notice either on the 31st December 1919 or at the expiration of any subsequent period of ten years, by paying a sum equal to 25 times the average yearly net earnings during the three years prior to determination, provided the payment does not exceed by more than 20 per cent., or is not less than, the total capital expenditure.

Power of Company to surrender contract.—Nil.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 10}}{\text{Sub-heads (a) to (c)}}$. **OUDH AND ROHILKHAND (STATE) RAILWAY SYSTEM—*concld.***

10. (*b*) Hardwar-Dehra railway (5′ 6″ gauge)—*concld.*

Terms of contract—*concld.*

Terms of working.—After deduction of 50 per cent. of the gross earnings for working expenses (which may include any single item of capital expenditure, not exceeding Rs. 1,000, classed as a 'Minor Work', subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year) and repayment to Government of the interest paid by Government under the contract and attributable to each half-year, the residue, if any, at the end of the year to be divided in equal proportions between the Government and the Company.

Rates and fares.—Rates and fares to be arranged between Government and the working agency within one-and-half times the maximum and minimum rates and fares in force on the Oudh and Rohilkhand (State) railway.

Statistics of working—

Table I.								Table II.		Remarks.
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.	
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1897	1,96,617	...	...	...	...	...	...	...	...	Interest up to 1900 was charged to capital and net earnings of 1900 were credited to capital in reduction of interest charges.
1898	10,70,315	...	...	...	...	...	...	...	...	
1899	23,42,657	...	...	...	...	...	...	...	...	
1900	23,57,093	1,60,485	80,243	3·13	...	...	...	115	50·00	
1901	28,12,901	2,13,456	1,06,728	3·80	84,220	...	+22,508	128	50·00	
1902	28,36,486	2,52,435	1,26,242	4·45	85,048	11,253	+29,941	152	50·00	
1903	28,44,542	2,62,719	1,31,359	4·62	85,260	20,597	*+25,502	158	50·00	
1904	29,12,992	2,63,612	1,31,806	4·52	86,777	23,050	+21,979	158	50·00	
1905	29,20,650	3,13,476	1,56,738	5·37	87,590	22,515	+46,633	188	50·00	

10. (*c*) Cawnpore-Burhwal (3′ 3⅜″ gauge) link—

The construction of the Cawnpore-Burhwal (3′ 3⅜″ gauge) link was sanctioned as a part of the project for linking up the 3′ 3⅜″ gauge systems of Northern India.

Details of construction—

The link is 79·60 miles long. Its construction was sanctioned in 1894 and it was opened through in 1897.

Permanent-way.—Where the line is not mixed gauge it is laid with new 50-lb. steel rails.

Ballast.—The line is ballasted throughout with kunkur, stone, or shingle.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

Terms of contract—

The line is owned by the State. The Bengal and North-Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand (State) railway, dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand (State) railway 80 per cent. of the gross receipts arising therefrom.

Statistics of working—

Included with the Oudh and Rohilkhand (State) railway (5′ 6″ gauge).

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) \& (b)}}$. **ASSAM-BENGAL RAILWAY SYSTEM—**

Lines comprising the system.—The Assam-Bengal railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Assam-Bengal railway (3′ 3⅜″ gauge)	740·38	19·00	759·38
(*b*) Noakhali (Bengal) railway (3′ 3⅜″ gauge)	34·90	...	34·90
Total	775·28	19·00	794·28

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State.

11. (*a*) Assam-Bengal railway proper (3′ 3⅜″ gauge)—

Details of construction—

The total open mileage of the line is 740·38 miles, which may be divided into (1) main line (Chittagong to Tinsukia), 576·61 miles, and (2) branches, 163·77 miles. The main line was opened through to Tinsukia in 1903.

Besides the above 19 miles were sanctioned for construction in 1905.

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails, partly on sâl and pyinkado, and partly on bastard sâl, nageshur and jarrah wood, sleepers.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads (a) and (b)}}$. **ASSAM-BENGAL RAILWAY SYSTEM—*contd.***

11. (*a*) Assam-Bengal railway proper (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Ballast.—The ballast consists of broken brick, stone and laterite. The whole line has not yet been ballasted.

Fencing.—The line is fenced between Chittagong Port and Silchar, Laksam and Chandpur, Gauhati Ghat and Gauhati, and half a mile from Gauhati towards Lumding, and at some stations on the hill section.

Curves.—The sharpest curve is of 358 feet radius.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding 1 in 60, with a 1 in 37 banking section 8 54 miles long; between Gauhati and Tinsukia, 1 in 100; between Laksam and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150.

Terms of contract—

The Assam-Bengal railway is worked under the following contract:—

Contract of—26th April 1892 (between the Secretary of State and the Assam-Bengal Railway Company) for construction and working.

The general conditions of the contract are:—

Government aid—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. Up to 30th June 1898 interest was allowed at 3½ per cent. Land was provided free of charge.

Terms of contract.—The contract provides that the Company raises £1,500,000, and that any further money required be supplied either by the Government or raised by the Company under guarantee. Subject to the provisions of the contract, all land and everything constructed or to be constructed thereon, and generally all property, whether real or personal, (with the exception of monies paid against interest on the Company's share capital and sums applied from net earnings) are the property of Government, but are subject to use and enjoyment by the Company during the continuance of the contract.

Currency of contract.—Government may determine the contract, by giving the Company in England 12 months' previous notice, on the 31st December 1921 or at the end of any succeeding 10th year. Government may also determine the contract at any time, on six months' notice, if the Company fails to fulfil its obligations or the line is worked at a loss for not less than three half-years consecutively. On the determination of the contract the Company is to hand over to Government the railway and all its belongings of every description, on repayment of the amount of the par value of the share capital paid by the Company to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net earnings to be applied in payment of—

(1) Contribution due to the Provident Fund, calculated at one per cent. of net earnings.

(2) The equivalent in rupees of interest paid on debenture capital; provided that if the Company's share capital is not less than $\frac{4}{11}$ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to the 30th June 1893), shall not exceed the rate for the time being applicable to the Company's share capital.

(3) The equivalent in rupees of guaranteed interest paid to the Company in respect of share capital; interest on the capital contributed or deemed to be contributed by Government, at the same rate as the guarantee for the time being on the Company's capital. But if the Government capital exceeds $\frac{8}{11}$ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement; and the residue is divisible between Government and the Company in the ratio of their respective capital expenditure.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Table I.						Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1891	1,53,203	...	...	...	5,893	—5,893	...	...
1892	30,16,783	...	...	...	2,66,378	—2,66,378	...	...
1893	1,07,63,192	...	...	...	7,09,987	—7,09,987	...	...
1894	2,46,89,898	...	...	...	8,76,954	—8,76,954	...	...
1895	4,04,38,298	2,14,426	—8,047	...	13,95,636	—14,03,683	64	183·75
1896	5,21,39,304	6,18,785	33,238	0·06	23,73,034	—23,39,796	71	94·63
1897	6,37,67,401	9,90,640	72,214	0·11	22,56,279	—21,84,065	63	92·71
1898	7,56,41,721	13,08,124	54,551	0·07	24,45,275	—23,90,724	86	95·83
1899	8,69,56,236	16,19,646	3,22,704	0·37	26,63,084	—25,40,380	75	80·08
1900	9,56,01,772	17,09,955	3,64,364	0·38	33,31,390	—29,67,026	75	78·69
1901	10,41,49,467	21,34,252	4,56,654	0·44	35,06,253	—30,49,598	70	78·60
1902	11,11,34,922	20,96,058	2,54,418	0·23	38,08,387	—35,53,969	68	87·86
1903	12,40,28,548	23,97,658	4,43,963	0·36	40,71,450	—36,27,487	72	80·51
1904	12,60,09,689	29,53,962	1,05,390	0·08	41,66,535	—40,61,145	77	94·78
1905	12,78,57,542	34,14,295	1,25,615	0·10	42,61,305	—41,35,691	88	94·68

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 11}}{\text{Sub-heads } (a) \text{ and } (b)}$. **ASSAM-BENGAL RAILWAY SYSTEM—*concld.***

11. (*b*) Noakhali (Bengal) railway (3′ 3⅜″ gauge)—

Details of construction—

This line, which connects Laksam with Saheb Ghatta, is 34·90 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Permanent-way.—The line is laid with 41¼-lb. steel rails on sál sleepers. A few jarrah wood sleepers are also in use.

Ballast.—The line is not ballasted.

Fencing.—The line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—

The Noakhali (Bengal) railway is worked under the following contracts :—

Contract of—27th March 1901 [between the Secretary of State and the Noakhali (Bengal) Railway Company] for construction of the line.

27th March 1901 [between the Assam-Bengal Railway Company, and the Noakhali (Bengal) Railway Company] for working the line.

The general conditions of the contracts are as follows :—

Government aid.—If the net earnings in any half-year are less than Rs. 30,000, Government allow as rebate a sum not exceeding one-half of the gross earnings of such half-year of the Assam-Bengal railway from the interchanged traffic (except stores) as will, together with the net earnings of the Company, make up an amount equal to Rs. 30,000. Land has been provided free of charge.

Terms of contracts.—The Company's share of stock capital is limited to £130,000, which cannot be increased without the sanction of the Secretary of State and of the working agency; but the Company can raise money at a reasonable rate of interest for *bond fide* temporary purposes.

Currency of contract.—The Secretary of State may, by giving notice and by paying to the Company in India the value of the railway, works, plant, machinery and stores, determine the contract, if the Company fails to comply with its obligations under the contract. The Secretary of State may, by giving twelve months' notice, determine the contract, either on the 31st December 1922 or on the 31st December in the last year of any subsequent period of ten years, on paying to the Company in India, within four calendar months from the time at which the contract should be determined, a sum equal to twenty-five times the average yearly net earnings during the three years immediately preceding, provided that the amount so payable shall not exceed by more than 20 per cent. the balance on the Capital Account of the Company or be less than such balance.

Terms of working.—The gross earnings are to be applied in payment—

(1) To the credit of the Provident Institution of the Assam-Bengal railway of a sum equal to one-half of 1 per cent. of the total gross earnings;

(2) Of Rs. 25 per mile open per week of the new railway maintainable by the Company; and of Rs. 35 per mile open per week of the new railway not maintainable by the Company, which includes any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half year; and

(3) Of all moneys paid or payable to the Secretary of State for the supervision of such mileage during such half-year; the residue to be paid over to the Company as the net earnings of the railway.

Rates and fares.—The rates and fares to be fixed from time to time by the Secretary of State after consultation with the working agency, within the maxima and minima for the time being in force on the Assam-Bengal railway.

Statistics of working—

	Table I.							Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Rebate from Assam-Bengal railway.	Total income.	Per cent. of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1903 . . .	21,04,627	30,099	2,409	0·11	23,389	25,798	1·23	30	92·00
1904 . .	21,59,851	55,840	−3,232	...	50,775	47,543	2·20	31	105·79
1905 . . .	21,35,523	68,493	1,666	0·08	56,055	57,721	2·71	38	97·57

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) \& (b)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—**

Lines comprising the system.—The Bengal and North-Western railway system is made up of—

	Open line.	Under construction, or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bengal and North-Western railway (3' 3⅜" gauge)	901·32	117·77	1,019·09
(*b*) Tirhoot railway (3' 3⅜" gauge)	565·45	212·17	777·62
Total	1,466·77	329·94	1,796·71

Running powers—

Home line over Foreign lines—

	Miles.
Cawnpore to Aishbagh, Cawnpore-Burhwal (3' 3⅜" gauge) link, Oudh and Rohilkhand (State) railway	45·03
Aishbagh to Daliganj, Lucknow-Bareilly railway (for passenger and goods trains.)	3·40
Daliganj to Burhwal, Cawnpore-Burhwal (3' 3⅜" gauge) link, Oudh and Rohilkhand (State) railway (for passenger and goods trains.)	34·57
Benares Cantonment to Benares City, Oudh and Rohilkhand (State) railway (for passenger and goods trains.)	1·81
Total ...	84·81

12. (*a*) Bengal and North-Western railway proper (3' 3⅜" gauge)—

Details of construction—

The total open mileage of the railway is 901·32 miles.

This may be divided into (1) main line (Sonepore to Ajodhya) 237·10 miles; (2) loop line (Sonepore to Bunwarchak) 9·34 miles; and (3) branches, 654·88 miles. The construction of the main line was sanctioned in 1882 and it was opened through in 1885.

Besides the above there are 117·77 miles under construction.

Permanent-way.—The main line between Sonepore and Burhwal is laid with 50-lb. steel rails on sâl sleepers. The rest of the line north of the Gogra is laid with 41¼-lb. steel rails mostly on sâl sleepers. The Ganges-Gogra Doab lines, with the exception of the Aunrihar-Phephna branch which is laid with 50-lb. steel rails, is laid with 41¼-lb. steel rails on sâl sleepers, and are being relaid with 50-lb. steel rails.

Ballast.—The whole line, except quite new constructions, is ballasted with kunkur or broken brick.

Fencing.—The main line is fenced.

Curves.—The sharpest curve is of 900 feet radius.

Gradients.—The ruling gradient is 1 in 300. On the various ghat lines the gradients are steeper.

Terms of contracts—

The Bengal and North-Western and Tirhoot railways are worked under the following contracts:—

Contracts of—12th December 1882.—Bengal and North-Western Railway Company's principal contract.

22nd February 1886.—Contract modifying that of 1882.

19th December 1894.—Contract supplemental to those of 1882 and 1886, providing for the Revelganj, Bahramghat, Burhwal, Tulsipur, Katarnian Ghat and Turtipur branches of the Company's railway and for the exercise of running powers over the Cawnpore-Burhwal (3' 3⅜" gauge) link.

23rd July 1896.—Contract supplemental to those of 1882, 1886 and 1894, providing for the Ganges-Gogra Doab lines of the Company's railway, known as the Ganges-Gogra Doab contract.

15th January 1903.—Supplemental contract for the Ghazipur-Ballia, Azamgarh-Shahganj and Aunrihar-Jaunpur lines.

24th April 1903.—Supplemental contract regarding rate of exchange.

14th December 1905.—Contract, supplemental to that of 1882, regarding the date on which the Secretary of State may exercise his right to purchase the Company's line and the period at which he may fix the purchase price, and revising the terms on which the Tirhoot railway will continue to be worked by the Bengal and North Western Railway Company after the expiration, on the 31st December 1904, of the contract of 1890.

The general conditions of the contracts are as follows:—

Government aid.—Land alone was provided free of charge.

Currency of contracts.—(1) *Bengal and North-Western railway contracts.*—The contracts of 1882, 1886 and 1894, *viz.*, those for the working of the Bengal and North-Western railway proper, terminate by effluxion of time on the 31st December 1931, when the line and all its appurtenances become the property of Government by payment to the Company of the value of the rolling-stock, movable machinery, stores, etc. Government may, however, determine the contract on the 31st December 1912 or on the 31st December 1932, on one year's previous notice of intention to purchase, paying 25 times the average net earnings (after deducting from such net earnings the share of surplus profits over 6 per cent. to which Government *would have been* entitled under the contract of 12th December 1882) for the five years preceding the purchase. Government may also determine the contract at any time, on six months' notice, if the Company fails to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of line and fixed machinery and plant, less value of latter treated as a reversionary sum absolutely payable on the 31st December 1931.

(2) *Ganges-Gogra Doab contract.*—The contract of 1896, *viz.*, that covering the Ganges-Gogra Doab lines, runs concurrently with those of 1882, 1886 and 1894, as does also the supplemental contract of 1903; but, in the event of Government exercising the right of purchase in 1912 or 1932, the amount to be paid is the actual outlay on the line, as shown in sterling, appearing in the capital account.

NOTE.—Government have relinquished their right to acquire the Company's line on the 31st December 1912, on the condition that they shall have the power to fix in 1912 the purchase price of the Bengal and North-Western railway and to purchase the line at that price on the 31st December 1932.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) \& (b)}}$. **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.***

12. (*a*) Bengal and North-Western railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

(3) *Tirhoot railway contract.*—The contract of 1890, *viz.*, that for working the Tirhoot railway, terminated on the 31st December 1904, and the revised contract under which the railway will continue to be worked by the Company came into force on and from the 1st January 1905 and terminates on the 31st December 1932, subject to the proviso that the Secretary of State may, if he should think it desirable, terminate it in 1919 or modify it at that date in such manner as he may think fit.

Power of Company to surrender contracts.—Nil.

Terms of working.—The gross earnings of the State and Company's sections to be kept entirely separate.

All charges for maintenance of way, works and stations, other than those for general supervision, to be allocated to each section on the basis of actual outlay on that section, all other working expenses being divided between the two sections in proportion to the gross earnings of each.

4 per cent. on respective outlay on "rolling stock," "steamers, barges and landing stages," "stores," "station, station machinery and staff quarters at Sonepore" for "joint use," and future expenditure on "workshops," shall be charged to working expenses in addition to ordinary working expenses and contribution to Provident Fund, for apportionment to the State and Company's sections, in the ratio of their respective gross earnings. This amount of interest to be credited to the respective Revenue Accounts in the ratio of contributions of capital to the joint accounts.

Government to first receive out of Tirhoot railway net earnings of each year 5 per cent. on all capital expended on the Tirhoot line open for traffic, including expenditure subsequent to 31st December 1904.

The residue of net earnings to be dealt with as follows :—

(*a*) if the residue does not exceed ten lakhs, $\frac{4}{5}$ths to Government and $\frac{1}{5}$th to the Company ;

(*b*) if the residue exceeds 10 lakhs, the sum of 10 lakhs shall be divided as in condition (*a*) and the excess over 10 lakhs shall belong $\frac{14}{15}$ths to Government and $\frac{1}{15}$th to the Company.

Rates and fares.—On the Company's section the Company may, with the approval of Government, fix rates and fares. On the Tirhoot section certain maxima and minima have been fixed, within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Payments received for working the Tirhoot Railway.	Total income.	Percentage on capital outlay.	Table II. Including the Tirhoot railway from 1890. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884	1,52,47,428	77,670	Information not available.	Information not available	−26,221	...	29	133·76
1885	2,01,86,980	12,95,320			6,10,799	3·03	72	49·32
1886	2,36,16,102	18,51,074			8,09,169	3·43	106	50·36
1887	2,56,22,654	19,44,002			8,37,004	3·27	90	56·94
1888	2,61,51,593	22,09,553			9,88,844	3·78	102	55·25
1889	2,63,41,872	22,11,824			10,53,964	4·00	103	52·35
1890	2,57,94,904	22,18,615			12,32,397	4·86	121	44·08
1891	2,76,68,842	24,76,909	15,54,509	69,484	16,20,993	5·87	121	40·04
1892	2,83,88,821	29,39,077	16,34,194	67,060	17,01,254	5·99	120	41·12
1893	2,84,84,234	26,14,546	15,81,860	66,842	16,48,702	5·79	123	48·20
1894	2,87,24,887	26,17,242	16,95,265	72,358	17,67,623	6·15	130	41·79
1895	3,12,95,704	25,71,036	16,82,766	72,909	17,55,675	5·61	133	42·45
1896	3,43,36,114	26,26,033	16,70,172	71,614	17,41,786	5·07	134	43·97
1897	4,10,32,207	27,55,718	17,24,277	74,905	17,99,182	4·38	128	43·78
1898	4,66,78,822	33,31,890	19,74,920	75,885	20,50,805	4·39	129	43·37
1899	5,16,06,763	43,44,861	26,70,911	61,940	27,32,851	5·30	131	46·67
1900	5,24,73,019	44,56,593	24,79,433	49,563	25,28,996	4·82	128	49·56
1901	5,50,91,830	53,66,794	30,97,372	76,853	31,74,225	5·76	140	44·51
1902	5,84,82,525	55,60,238	29,72,183	76,671	30,40,854	5·91	154	46·32
1903	6,21,09,547	61,98,433	38,53,972	1,04,369	39,58,341	6·47	161	40·64
1904	6,43,92,183	67,16,933	43,28,496	1,16,834	44,45,330	6·90	168	39·68
1905	6,77,55,566	61,79,116	34,72,017	1,69,446	36,41,463	5·37	151	43·11

12. (*b*) Tirhoot railway (3′ 3⅜″ gauge)—

Details of construction—

The open mileage of this railway is 565·45 miles, consisting of (1) main line (Semaria Ghat to Bettiah and Samastipur to Khanwa Ghat), 242·58 miles, and (2) branches, 322·87 miles. First sanction to the construction of the main line was accorded in 1874 and it was opened throughout in 1890. Besides the above there are 212·17 miles under construction.

Permanent-way.—The following types of rails are in use :—50-lb. flat-footed steel, 41½-lb. flat-footed steel and 60-lb. iron. The sleepers are of sâl, pyinkado, and cast iron of Denham-Olpherts' pattern.

Ballast.—The line (except quite new constructions) is ballasted with kunkur or broken brick.

Fencing.—The main line is fenced with stone posts and 4 wires.

Curves.—The sharpest curve, which is on the main line, is of 1,500 feet radius.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 12}}{\text{Sub-heads (a) \& (b).}}$ **BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*concld.***

12. (*b*) Tirhoot railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Gradients.—The ruling gradient is 1 in 300, except between Samastipur and Khanwa Ghat on which 3·42 miles are on a gradient of 1 in 200. On various river ghat lines the gradients are steeper.

Terms of contracts—See under Bengal and North-Western railway proper, 12 (*a*).

Statistics of working—

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on capital outlay.	Interest.	Gain or loss to the State.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1875	...	...	Information not available.	Information not available.	...	...	...	...	89	107·62	
1876	...	...			...	...	...	...	71	68·67	
1877	...	...			...	...	...	...	77	69·85	
1878	...	...			...	...	...	...	103	75·34	
1879	53,38,320	4,58,733			1,07,519	2·02	2,37,411	−1,29,592	113	76·49	
1880	56,13,274	5,51,068			2,33,662	4·16	2,50,679	−16,997	102	56·40	
1881	72,02,917	5,84,255			2,36,700	3·28	2,67,245	−31,045	110	59·57	
1882	1,07,92,877	6,60,022			2,54,047	2·36	3,86,612	−1,32,565	136	61·50	
1883	1,32,81,024	8,92,441			3,59,705	1·96	4,99,014	−2,39,309	103	70·90	
1884	1,45,64,962	11,90,072			2,66,582	1·79	5,74,389	−3,07,787	105	77·60	
1885	1,44,47,916	12,78,634			3,59,269	2·49	5,86,195	−2,26,926	98	71·90	
1886	1,54,33,549	14,98,638			5,01,189	3·25	6,30,944	−1,29,755	109	66·56	
1887	1,97,49,195	17,22,955			6,95,725	3·52	7,79,801	−84,076	122	59·62	
1888	2,07,78,252	18,07,283			7,98,875	3·85	8,17,485	−18,610	123	55·80	
1889	2,12,28,094	18,96,674			9,78,246	4·61	8,41,932	+1,36,314	122	48·42	
									Included with Bengal and North-Western railway.		
1890	2,29,84,165	23,92,977			13,21,797	5·75	9,41,207	+3,80,590	...	...	
1891	2,34,99,148	24,89,279	14,23,382	69,484	13,53,848	5·76	9,34,385	+4,19,463	...	...	
1892	2,43,25,804	21,84,862	13,82,875	67,060	13,15,915	5·41	9,50,025	+3,65,790	...	...	
1893	2,49,08,803	26,81,190	14,09,975	66,842	13,43,133	5·39	10,01,205	+3,41,928	...	...	
1894	2,50,08,061	29,42,305	15,35,581	72,358	14,63,223	5·85	9,98,388	+4,64,835	...	...	
1895	2,56,02,092	30,89,614	15,61,276	72,909	14,88,367	5·81	10,18,013	+4,70,354	...	...	
1896	2,60,38,655	31,61,172	15,56,944	71,614	14,85,330	5·70	10,27,821	+4,57,509	...	...	
1897	3,11,00,098	32,38,109	16,29,812	74,905	15,51,907	5·00	10,38,630	+5,16,277	...	...	
1898	3,46,43,176	31,14,140	16,67,068	75,885	15,91,183	4·59	13,18,764	+2,72,419	...	...	
1899	3,60,27,533	34,24,868	14,42,101	61,940	13,20,161	3·63	14,62,603	− 82,442	...	...	
1900	4,30,15,249	36,47,197	15,66,413	49,563	15,16,850	3·53	16,19,231	−1,02,381	...	...	
1901	4,61,91,293	43,16,760	22,75,660	76,853	21,98,807	4·76	17,67,799	+4,31,008	...	...	
1902	4,91,41,700	45,50,632	24,55,201	76,671	23,78,530	4·84	18,77,205	+5,01,325	...	...	Includes Sagauli-Raxaul branch from 11th April 1904.
1903	5,08,63,468	56,72,952	31,92,619	1,04,369	30,88,250	6·07	19,80,515	+11,01,735	...	...	
1904	5,64,95,579	62,63,114	34,98,567	1,14,862	33,83,705	5·99	21,48,021	+12,35,684	...	...	
1905	6,21,36,962	61,81,754	35,57,423	1,69,446	33,87,977	5·45	23,54,563	+10,33,414	...	...	

Sagauli-Raxaul branch, before it was purchased by the State.

Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Table II: Earnings per mile per week.	Table II: Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	1,26,044	...	...	...	...	...
1897	6,68,783	...	...	...	...	...
1898	8,07,550	...	...	...	...	...
1899	10,81,740	5,433	Credited to interest on capital.	...	30	40·00
1900	12,12,073	25,830	...	...	30	52·62
1901	10,67,014	37,132	13,593	1·27	40	63·44
1902	11,73,421	39,296	18,632	1·74	42	52·57
1903	11,16,252	43,309	18,571	1·66	51	57·61
1904 (up to 10th April)	11,16,252	18,740	10,114	0·91	74	46·03

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) \& (b)}}$ **BENGAL DOOARS RAILWAY SYSTEM—**

Lines comprising the system—The Bengal Dooars railway system is made up of—

	Open line. Miles.
(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)	36·40
(*b*) Bengal Dooars railway extensions (3′ 3⅜″ gauge)	116·56
Total	152·96

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) and (b)}}$. **BENGAL DOOARS RAILWAY SYSTEM**—*contd.*

13. (*a*) Bengal Dooars railway proper (3' 3½" gauge)—

Details of construction—

The total length of open mileage is 36·40 miles, divided into main line (East Bank Teesta to Dam, Dim), 31 miles and branch, 5·40 miles. Construction was sanctioned in 1891 and the line was opened through in 1893.

Permanent-way.—The line has been laid with 41½-lb. flat-footed steel rails on sál sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432·50 feet radius.

Gradients.—The ruling gradient is 1 in 166.

Terms of contracts—

The Bengal Dooars railway and the extensions are worked under the following contracts:—

Contracts of—27th April 1891.—Bengal Dooars railway principal contract.

2nd March 1898.—Contract supplemental to that of 1891 (for extensions).

27th September 1900.—Supplemental to that of 1898 (extending period of completion of Dam Dim-Bagrakote extension).

7th November 1901.—Supplemental to those of 1898 and 1900 (extending period for completion of Mal-Madari-Hat extension).

The general conditions of the contracts are as follows:—

Government aid.—Land free of cost from Government; and, from the District Board of Jalpaiguri, an annual subsidy of such amount not exceeding Rs. 4,000 per annum as may be required to make up the net profits of the undertaking to five per cent. per annum on the capital outlay.

Currency of contracts.—On the 31st December 1919, and thereafter at intervals of seven years, Government have power, by giving twelve months' previous notice, to terminate the contract and take over the line on payment to the Company in the case of the Bengal Dooars railway of one and two-fifths of the invested capital and capital liabilities, and in the case of the extensions of a sum equal to 25 times the average net earnings during the last preceding five years, but not exceeding by more than 20 per cent. the capital expenditure and capital liabilities of the Company and not less than the capital expended and the capital liabilities. If, at any period, the Bengal Dooars railway or the extensions should not be worked for six consecutive months, the Company can also be called upon to surrender the line and extensions on receipt of the actual sum expended up to the date of notice.

Terms of working.—If worked by the Company the whole of the profits go to the Company. If worked by the Eastern Bengal (State) railway the Secretary of State retains each half-year 40 per cent. of the gross earnings, the remaining 60 per cent. being paid to the Company after deduction of income-tax payable to Government.

Rates and fares—

Bengal Dooars railway and extensions from Mal to Madarihat and Dam Dim to Bagrakote—

Certain maxima and minima have been fixed subject to alteration from time to time. If the gross receipts reach 12 per cent. on capital, Government may reduce maxima to the extent of 25 per cent., except certain special rates.

Extension from Barnes Junction to Lalmanirhat—

Certain maxima and minima have been fixed within which charges can be made.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1891	16,479	...	...	...	...	...	...	...	...
1892	12,67,626	...	...	...	...	...	...	...	...
1893	18,49,091	1,14,812	57,639	3·12	...	57,639	3·12	69	49·80
1894	22,84,224	2,05,286	1,04,291	4·57	4,000	1,44,291	6·32	109	49·20
1895	23,26,476	2,58,537	1,27,458	5·48	4,000	1,31,458	5·65	125	49·73
1896	24,33,213	2,70,450	1,31,813	5·42	...	1,31,813	5·42	136	61·26
1897	26,50,713	2,86,407	1,45,289	5·48	...	1,45,289	5·48	145	49·27
1898	26,68,050	2,69,089	1,10,620	4·15	4,000	1,14,620	4·30	135	57·40
1899	26,26,748	2,73,037	1,18,416	4·51	...	1,18,416	4·51	137	55·41
1900	26,42,695	3,32,739	1,89,461	7·17	...	1,89,461	7·17	168	43·06
1901	26,44,873	3,10,920	1,76,399	6·67	...	1,76,399	6·67	156	43·27
1902	26,50,627	2,73,340	1,71,455	6·47	...	1,71,455	6·47	144	37·27
1903	26,95,547	3,09,965	2,23,786	8·30	...	2,23,786	8·30	156	27·80
1904	26,64,642	3,46,277	2,56,651	9·63	...	2,56,651	9·63	175	25·88
	27,26,891	3,76,343	2,49,598	9·15	...	2,49,598	9·15	196	32·60

APPENDIX 38—*contd.*

History of railway constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 13}}{\text{Sub-heads (a) and (b)}}$. **BENGAL DOOARS RAILWAY SYSTEM—*concld.***

13. (*b*) Bengal Dooars railway extensions (3′ 3½″ gauge)—

Details of construction—

The total open mileage of the extensions is 116·56 miles, comprised of (1) Eastern extension (Mal to Madaribat), 44 miles, (2) Southern extension (Barnes junction to Lalmanirhat), 65·80 miles, and (3) Western extension (Dam Dim to Bagrakote), 6·76 miles. The construction of the extensions was sanctioned in 1898 and they were opened in 1903, 1900 and 1902, respectively.

Permanent-way.—The line has been laid with 41¼-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curves is of 955 feet radius.

Gradients.—The ruling gradient of the Southern extension is 1 in 200 and that of the Eastern and Western extensions, 1 in 100.

Terms of contracts.—See under Bengal-Dooars railway proper, 13 (*a*).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	72,151	...	...	...	...	...
1898	4,03,611	...	...	...	...	...
1899	26,75,435	...	...	...	...	...
1900	47,11,632	16,191	5,015	0·11	13	72·31
1901	62,26,567	1,76,399	68,937	1·11	47	69·92
1902	72,66,166	2,58,634	86,266	1·19	62	65·99
1903	79,30,172	3,47,832	1,05,916	1·34	71	69·55
1904	84,97,571	4,15,179	1,08,680	1·28	68	73·85
1905	87.93,080	5,12,343	1,97,824	2·25	85	61·39

Number $\frac{\text{Main head 14}}{\text{Sub-heads (a) to (d)}}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—**

Lines comprising the system.—The Bhavnagar-Gondal-Junagad-Porbandar railway system is made up of—

		Open line. Miles.
(*a*) Bhavnagar-Gondal-Junagad-Porbandar railway	(3′ 3½″ gauge)	334·19
(*b*) Dhrangadra railway	(3′ 3½″ gauge)	20·83
(*c*) Jamnagar railway	(3′ 3½″ gauge)	54·22
(*d*) Jetalsar-Rajkot railway	(3′ 3½″ gauge)	46·21
	Total	455·45

14. (*a*) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3′ 3½″ gauge)—

This line was constructed by Government agency and is owned and worked by the Native States after which it is named.

Details of construction—

The line is 334·19 miles long. It consists of the following sections, (1) Bhavnagar to Wadhwan, 105·03 miles, (2) Dhola to Porbandar Bandar, 159·51 miles, and (3) Jetalsar to Veraval Bandar, 69·65 miles. The construction of the first two sections was sanctioned in 1879 and they were opened through in 1880 and 1889, respectively. The third section was sanctioned in 1886 and opened through in 1890.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine and deodar sleepers, except on the Dhoraji-Porbandar section where the rails are laid on steel pea-pod sleepers.

Ballast.—The line is ballasted with broken stone with the exception of the length between Chuda and Wadhwan which is ballasted with kunker.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 1,200 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on the Jetalsar-Veraval section where it is 1 in 150.

Terms of contracts—

The Bhavnagar-Gondal-Junagad-Porbandar railway system is worked under the following agreements :—

Agreements of—1st January 1897—For the management and working of the "Integral railways" as one system by a Board of Control.

1st June 1898—Dhrangadra railway—
8th April 1897—Jamnagar railway—
12th April 1893—Jetalsar-Rajkot railway— } For management and working by the Bhavnagar-Gondal-Junagad-Porbandar Railway Administration.

The general conditions of the agreements are as follows :—

Government aid.—Nil.

Terms of agreement.—The whole system is worked by a Board of Control, consisting of one nominee of Government to be President, and one nominee from each of the proprietary States of Bhavnagar, Gondal, Junagad and Porbandar. The existing lines owned by those States are separately and entirely described as the "Integral railways" and their combination is termed the "Open system." The decisions of the Board of Control are based on the majority of votes recorded

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads } (a) \text{ to } (d)}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

14. (*a*) Bhavnagar-Gondal-Junagad-Porbandar railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

("Members' single votes" and "Proprietary votes"). "Members' single votes" prevail at special meetings where each member has one vote, while "Proprietary votes," *i.e.*, votes revised annually on varying capital outlay, prevail at ordinary and extraordinary meetings.

Currency of agreement.—The term of the principal agreement for the working of the Bhavnagar-Gondal-Junagad-Porbandar railway proper is from the 1st January 1897 to the 31st December 1900. Until a new agreement has been adopted the terms of this agreement remain in force.

Power of Board to determine agreement.—By unanimous vote the Board of Control can cancel or modify any of the clauses of the agreement, and can also rescind or alter any resolution; no changes can otherwise be made until expiry of three months from date of passing such resolution. Any proprietary State can terminate the agreement after the 31st December 1900, subject to 12 months' notice at the beginning of the year.

Terms of working.—Bhavnagar-Gondal-Junagad-Porbandar railway.—The earnings of the several integral railways belong wholly and exclusively to each integral railway, and, similarly, the Capital and Revenue expenditure is wholly borne by the same. All expenditure on the open system and on the integral railways as may require apportionment is divisible as prescribed in Appendix A to the agreement. The Bhavnagar State provides funds for working the whole system as well as for ordinary capital on the integral railways, all receipts of the entire open system being paid into the Bhavnagar State Treasury. All funds for major capital works are provided by the integral railway concerned, or by special arrangement with the Bhavnagar State Treasury. Each integral railway is the sole proprietor of all works, buildings, etc., on its own length of line and is entitled to 7½ per cent. interest on the paid-up value of all property in occupancy for open system purposes, to compensation for losses for works and buildings falling into disuse and to 7½ per cent. per annum for any additional accommodation required by the open system.

Dhrangadra railway—
Jamnagar railway—
Jetalsar-Rajkot railway— } The Board of Control work the railways at 40 per cent. of gross earnings of each railway, *plus* actual expenditure incurred on the maintenance of way, works and stations; and supply rolling stock at 5 per cent. of gross earnings to the Jetalsar-Rajkot and Dhrangadra railways.

Rates and fares.—The maximum scale of rates and fares sanctioned by Government is applicable to the whole system, but rates and fares may be altered within this scale so as to accommodate them to the circumstances of traffic on any integral railway: provided that such alteration be not prejudicial to the interests of any other integral railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1879	4,80,177	...	...	...	...	...
1880	49,19,804	...	...	...	...	...
1881	74,46,353	6,58,385	2,31,706	3·11	78	70·18
1882	86,75,711	8,76,836	3,54,648	4·09	87	59·55
1883	90,49,232	8,94,179	3,26,513	3·61	89	63·47
1884	92,92,040	10,92,312	4,98,107	5·36	109	54·46
1885	96,25,031	10,04,660	3,91,247	4·07	98	59·55
1886	98,57,553	9,65,279	4,15,149	4·21	96	57·00
1887	1,00,28,023	9,80,837	4,42,103	4·06	98	54·93
1888	1,00,68,663	11,20,260	5,06,545	3·88	109	50·58
1889	1,02,60,477	13,80,417	7,04,177	4·33	97	56·55
1890	1,08,42,051	15,71,788	6,00,267	3·56	91	61·81
1891	1,71,24,771	14,77,263	4,75,786	2·78	85	67·79
1892	1,72,52,030	15,78,178	4,37,876	2·54	91	72·25
1893	1,72,28,860	20,63,104	8,88,708	5·16	119	56·92
1894	1,73,65,592	18,40,287	7,91,335	4·56	106	49·61
1895	1,76,00,032	19,52,221	8,21,220	4·67	113	57·93
1896	1,75,63,395	19,80,878	9,89,274	5·63	114	50·06
1897	1,76,53,653	18,21,640	8,19,081	4·64	105	55·04
1898	1,78,56,546	16,98,657	7,09,781	3·98	97	58·23
1899	1,79,56,272	18,53,468	9,26,935	5·16	107	49·99
1900	1,80,00,616	19,53,865	10,10,773	5·62	113	48·27
1901	1,80,96,671	15,37,378	6,80,089	3·76	89	55·76
1902	1,80,87,538	13,71,837	5,66,342	3·13	79	58·72
1903	1,81,53,314	16,04,638	8,36,670	4·61	93	47·86
1904	1,80,44,250	18 60,565	10,39,916	5·76	107	44·11
1905	1,80,09,429	18,51,324	9,90,981	5·50	106	46·47

14. (*b*) Dhrangadra railway (3′ 3⅜″ gauge)—

This line was constructed for the Dhrangadra State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads (a) to (d)}}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*contd.***

14 (*b*) Dhrangadra railway (3' 3⅜" gauge)—*concld.*

Details of construction—

The line is 20·83 miles long and connects Wadhwan with Dhrangadra. Its construction was sanctioned in 1897 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast used is of broken hard sand-stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,400 feet radius.

Gradients.—The ruling gradient is 1 in 175.

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, 14 (*a*).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	5,830	...	...	...	...	...
1898	5,93,589	23,395	10,617	1·79	37	54·62
1899	6,06,104	63,876	20,978	3·46	59	67·16
1900	5,86,534	87,866	18,984	3·24	53	66·91
1901	5,86,100	46,196	11,765	2·01	43	74·53
1902	5,85,911	37,731	8,075	1·38	35	78·60
1903	5,86,638	43,058	11,718	1·99	40	72·80
1904	5,87,116	47,516	15,446	2·63	44	67·49
1905	5,86,695	49,042	13,375	2·28	45	72·73

14 (*c*) Jamnagar railway (3' 3⅜" gauge)—

This line was constructed for the Navanagar State by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Details of construction—

The railway is 54·22 miles long and connects Rajkot with Bedi Bandar. Its construction was sanctioned in 1893 and it was opened in 1897.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on creosoted pine and deodar sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, 14 (*a*).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1894	17,000	...	...	...	...	...
1895	62,956	...	...	...	...	...
1896	14,91,727	...	...	...	...	...
1897	22,50,538	84,476	28,954	1·29	41	65·73
1898	23,18,496	1,02,945	31,782	1·37	36	69·13
1899	23,08,558	1,26,823	51,540	2·23	83	59·20
1900	23,09,481	1,49,153	59,540	2·58	53	60·09
1901	23,09,969	1,36,514	51,401	2·22	48	62·29
1902	23,58,240	1,31,104	53,751	2·28	46	59·00
1903	23,58,338	1,39,756	60,122	2·55	50	56·98
1904	23,27,231	1,41,030	56,721	2·44	58	59·78
1905	23,27,105	1,48,341	62,008	2·66	53	58·20

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 14}}{\text{Sub-heads } (a) \text{ to } (d)}$. **BHAVNAGAR-GONDAL-JUNAGAD-PORBANDAR RAILWAY SYSTEM—*concld.***

14. (*d*) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)—

This line was constructed for the Jetalsar-Rajkot Railway Syndicate by the Bhavnagar-Gondal-Junagad-Porbandar railway by which it is being worked.

Details of construction—

This line is 46·21 miles long. Its construction was sanctioned in 1892 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on creosoted pine sleepers, except for five miles where the rails are laid on steel trough sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except between Rajkot Para and Rajkot Junction.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contracts—See under Bhavnagar-Gondal-Junagad-Porbandar railway proper, 14 (*a*).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	7,89,792	...	...	...	...	...
1893	14,35,593	1,03,006	50,896	3·55	59	50·59
1894	14,99,605	1,55,556	61,152	4·08	65	60·68
1895	15,03,585	1,83,338	77,448	5·15	76	57·76
1896	15,29,265	1,97,116	84,238	5·51	82	57·26
1897	15,47,463	2,05,253	84,720	5·47	85	58·72
1898	15,78,017	1,78,941	76,057	4·82	74	57·50
1899	15,83,208	1,98,927	78,726	4·97	45	60·43
1900	15,74,082	2,02,718	86,214	5·48	84	57·47
1901	15,74,023	1,76,388	67,251	4·27	73	61·87
1902	15,78,583	1,44,317	54,485	3·45	60	62·25
1903	15,78,658	1,66,404	63,230	4·01	69	62·00
1904	15,78,655	1,88,439	69,248	4·39	78	63·25
1905	15,80,207	1,91,155	74,882	4·74	80	60·83

Number $\frac{\text{Main head 15}}{\text{Sub-heads } (a) \text{ \& } (b)}$. **BURMA RAILWAYS SYSTEM—**

Lines comprising the system.—The Burma railways system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Burma railways (3′ 3⅜″ gauge)	1,340·15	6·70	1,346·85
(*b*) Burma railways extensions (3′ 3⅜″ gauge)	...	186·93	186·93
Total	1,340·15	193·63	1,533·78

15. (*a*) Burma railways proper (3′ 3⅜″ gauge)—

The Burma Railways Company was formed in 1896 for the purpose of taking over the working of the then existing system of State railways (3′ 3⅜″ gauge) in Burma and extending it by the construction of other lines, particularly one from Mandalay to Kunlong. The railways taken over by the Company from Government on the 1st September 1896 comprised the following lines:—Rangoon to Prome on the Irrawaddy river; Rangoon to Mandalay, and thence to the bank of the Irrawaddy, opposite Sagaing; and Sagaing to Mogaung, with an extension to Myitkyina and a branch to Katha, whence there is communication by river with Bhamo.

Details of construction—

The open mileage of the Burma railways, 1,340·15 miles, consists of (1) *Main line section*, main line (Rangoon to Mandalay), 386 miles, branches, 81·60 miles; (2) *Irrawaddy section* (Rangoon to Prome), 161 miles; (3) *Mu Valley section*, main line (Sagaing to Myitkyina), 331·29 miles; branches, 91·46 miles; (4) *Mandalay-Kunlong section* (Myohaung to Lashio), 177·84 miles, and (5) *Bassein-Henzada Letpadan section*, 110·96 miles. Of the above 23·80 miles are double line.

First sanction to the construction was given in 1874; and the first three sections were opened through in 1889, 1877 and 1898, respectively, and the last two sections in 1903.

Besides the above 6·70 miles were sanctioned for construction in 1905.

Permanent-way.—The rails in use on the system are 50-lb. and 41¼-lb. flat-footed steel. The sleepers throughout are generally of teak, pyinma and pyinkado, the last named largely predominating.

Ballast.—The ballast used is either shingle or broken stone.

Fencing.—The main line (Rangoon to Mandalay) and the Irrawaddy line (Rangoon to Prome) are fenced. The Mu Valley line is generally unfenced, except at a few stations. The Mandalay-Kunlong section is unfenced. On the Bassein-Henzada line, the Bassein and Henzada station yards are fenced and the work of fencing the whole length is now in progress.

Curves.—On the main line (Rangoon to Mandalay), the sharpest curve has a radius of 573 feet, on the Rangoon-Prome section of 1,146 feet. The sharpest curves on the Bassein-Henzada, Letpadan-Tharawaw, Meiktila-Myingyan and Sagaing-Alon branches have radii of 955, 1,432, 1,273 and 2,865 feet, respectively. On the Lashio branch the sharpest curve has a radius of 337 feet. On the Mu Valley line, the Katha branch and the Naukan-Mohnyin section the sharpest curve has a radius of 573 feet.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 15}}{\text{Sub-heads (a) and (b)}}$. **BURMA RAILWAYS SYSTEM** —*concld.*

15. (*a*) Burma railways proper (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Gradients.—The ruling gradient on the main line is 1 in 200, uncompensated; on the Lashio branch it is 1 in 25, compensated; on the Mu Valley 1 in 60, uncompensated; on the Myingyan branch, 1 in 100, uncompensated; on the Sagaing-Alon branch, 1 in 150, uncompensated, and on the Katha branch, 1 in 50, compensated.

Terms of contract—

The railways are worked under the following contract :—

Contract of—9th March 1897 (between the Secretary of State and the Burma Railways Company) for transfer and management.

The general conditions of the contract are as follows :—

Government aid.—Interest is guaranteed at 2½ per cent. on the Company's share capital. Land was provided free.

Currency of contract.—Government may determine the contract, after giving six months' notice, if the Company fails to perform its obligations, or if the undertaking be, in the opinion of the Secretary of State, in course of gross mismanagement by the Company, or if it be worked at a loss for three consecutive half-years. Government may also determine the contract on the 31st December 1921, or at the end of any succeeding tenth year, by giving twelve months' previous notice. On the determination of the contract from any cause the Secretary of State is to repay to the Company in sterling at par the capital raised by the latter.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision) the net receipts in each half-year are to be applied in payment to Government of—

(1) The equivalent of the interest paid for the half-year on any debentures issued by the Company;

(2) The equivalent of the guaranteed interest at 2½ per cent. per annum on the Company's capital of £2,000,000, and of the interest payable on any additional share capital raised by the Company;

(3) The equivalent of interest at 2½ per cent. per annum on the sterling equivalent of the capital expenditure by Government on the railways up to the date of the transfer, and of interest on any additional moneys supplied by Government.

After payment of the interest above-mentioned, any surplus which may remain unpaid in a year ending on the 30th June, to be divided between Government and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1877	...	...	...	...	...	...	...	61	129·36
1878	...	...	...	...	...	...	...	115	93·03
1879	1,22,86,597	9,55,913	1,41,743	1·14	5,47,488	...	−4,05,695	114	85·17
1880	1,25,87,340	13,22,710	5,21,085	4·14	5,62,331	...	−41,246	158	60·60
1881	1,36,51,992	15,43,622	6,45,077	4·73	5,86,210	...	+58,867	134	58·21
1882	1,78,39,232	15,75,691	6,30,430	3·53	6,23,969	...	+6,461	138	59·99
1883	2,19,77,689	15,62,886	5,60,766	2·55	7,46,068	...	−1,85,302	137	64·06
1884	2,56,37,089	21,05,421	8,21,936	3·21	9,69,215	...	−1,47,279	181	60·96
1885	2,72,85,343	21,63,656	4,73,123	1·73	10,61,184	...	−5,88,061	143	78·13
1886	2,88,52,604	26,57,955	9,41,149	3·26	12,64,342	...	−3,23,093	156	64·51
1887	3,66,52,847	33,24,263	15,58,303	4·25	13,15,249	...	+2,43,054	192	53·12
1888	4,83,73,677	35,76,218	12,71,960	2·63	18,18,560	...	−5,46,600	171	62·33
1889	5,12,49,158	46,90,263	15,73,552	3·07	20,17,224	...	−4,43,672	169	66·45
1890	5,56,22,296	54,71,432	23,48,191	4·22	21,35,308	...	+2,12,883	210	57·08
1891	6,06,31,289	58,55,197	23,71,392	3·90	23,28,287	...	+43,105	199	59·50
1892	6,64,02,875	71,00,618	33,86,088	5·10	24,90,221	...	+8,95,867	237	52·31
1893	7,03,47,005	67,22,506	22,42,492	3·19	27,19,995	...	−4,77,503	178	66·64
1894	7,37,14,721	62,37,354	23,23,328	3·15	28,94,375	...	−5,71,047	164	63·05
1895	7,57,29,659	67,11,062	27,02,356	3·57	30,01,168	...	−2,98,807	169	59·73
1896	8,13,44,229	76,08,558	29,85,751	3·67	34,43,442	...	−4,57,691	167	60·76
1897	8,73,31,890	86,76,403	38,82,673	4·45	38,31,674	1,62,877	−1,11,878	188	55·25
1898	9,24,93,509	89,91,451	37,88,523	4·10	39,49,899	1,61,076	−3,22,452	184	57·87
1899	10,11,17,647	88,25,724	35,78,407	3·54	38,35,209	1,24,994	−3,81,796	179	59·45
1900	11,33,96,685	1,10,29,947	48,94,824	4·43	38,49,026	3,47,606	+6,98,192	195	55·62
1901	11,99,22,408	1,18,85,329	49,89,656	4·16	40,41,108	4,42,439	+5,06,109	197	58·02
1902	12,70,23,590	1,25,02,671	52,72,688	4·66	43,94,823	4,69,365	+4,08,495	203	57·83
1903	13,01,30,277	1,36,14,478	52,19,322	4·01	44,06,500	4,32,246	+3,80,576	197	61·66
1904	13,38,28,678	1,51,02,416	65,70,760	4·92	44,71,268	5,92,997	+15,06,495	216	56·49
1905	13,55,91,056	1,57,75,957	61,81,068	4·56	45,35,974	6,77,542	+9,67,547	226	60·82

15. (*b*) Burma railways extensions (3′ 3⅜″ gauge)—

Details of construction—

There are two lines under construction, *viz.*, (1) Pegu to Martaban, 121·27 miles long, which was sanctioned in 1903; and (2) Henzada to Kyangin, 65·66 miles long, sanctioned in 1904.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 16}}{\text{Sub-head (a)}}$. **DEOGHUR RAILWAY** (3′ 3⅜″ gauge)—

Details of construction—

This line connects Deoghur with Baidyanath, a station on the East Indian Railway, and is 4·79 miles long. It was sanctioned in 1881 and opened in 1882.

Permanent-way.—The permanent-way is laid with 36-lb. steel rails on wooden sleepers.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 2,640 feet.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The railway is worked under the following contract:—

Contract of—12th July 1883 (between the Secretary of State and the Deoghur Railway Company) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Land alone was provided free of charge.

Terms of contract.—Messrs. Burn & Co. constructed the railway with capital raised locally and without any guarantee.

Currency of contract.—Government may, after giving six months' notice, determine the contract, and take over the railway at a valuation based on the earnings for the two years immediately previous to such resumption, if the Company fails to perform its obligations. Government may also, by giving 12 months' notice, determine the contract and take over the railway at a valuation calculated at the average market rate of the shares during the previous three years, together with bonus not exceeding 20 per cent. of such value, after the railway has been opened for traffic for 30 years, and thereafter at terms of 10 years.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	2,73,331	19,639	6,242	2·28	79	68·00
1884	2,75,000	23,735	10,704	3·90	83	54·90
1885	2,75,000	23,987	9,908	3·60	88	58·69
1886	2,75,042	25,017	11,743	4·27	100	53·06
1887	2,75,043	24,532	12,108	4·40	98	50·64
1888	2,81,180	25,812	11,521	4·10	104	55·37
1889	2,82,876	28,583	12,695	4·49	115	55·51
1890	2,82,616	26,095	10,915	3·86	105	58·17
1891	2,82,752	31,165	15,429	5·46	125	50·49
1892	2,88,329	26,964	9,707	3·37	108	64·00
1893	2,87,364	37,809	19,103	6·65	152	49·47
1894	2,87,526	29,425	9,659	3·36	118	67·17
1895	2,88,086	33,611	15,368	5·31	130	54·46
1896	2,87,797	30,014	11,498	4·00	120	61·69
1897	2,87,942	30,320	11,152	3·87	122	63·22
1898	2,88,453	32,100	6,601	2·28	129	79·44
1899	2,87,525	33,262	6,678	2·32	134	79·92
1900	2,87,379	34,900	7,376	2·56	140	78·87
1901	2,85,265	48,293	18,616	6·53	194	61·45
1902	3,01,057	29,758	6,025	2·00	120	79·75
1903	3,01,057	40,458	10,622	3·53	162	73·75
1904	3,01,057	46,635	14,701	4·88	187	68·48
1905	3,24,444	45,397	13,582	4·19	182	70·08

Number $\frac{\text{Main head 17}}{\text{Sub-heads (a) and (b)}}$. **DIBRU-SADIYA RAILWAY SYSTEM—**

Lines comprising the system.—The Dibru-Sadiya railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Dibru-Sadiya railway (3′ 3⅜″ gauge)	77·50	8·50	86·00
(*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)	8·50	...	8·50
Total	86·00	8·50	94·50

17. (*a*) Dibru-Sadiya railway proper (3′ 3⅜″ gauge)—

Details of construction—

This line is 77·50 miles long and may be divided into main line (Dibrugarh to Dihing Bridge), 61·50 miles, and the Talap branch, 16 miles. Its construction was sanctioned in 1881 and it was opened through in 1885.

There were 8·50 miles sanctioned for construction in 1905.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 17}}{\text{Sub-heads (a) and (b)}}$. **DIBRU-SADIYA RAILWAY SYSTEM—*contd.***

17. (*a*) Dibru-Sadiya railway proper (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Permanent-way.—The line is laid with 41¼-lb. and 50-lb. flat-footed steel rails. The sleepers are uriam and cast iron plate of the Denham-Olpherts' type.

Ballast.—The line is partially ballasted with broken stone.

Fencing.—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—26th May 1880 (between the Secretary of State and the Assam Railway Company) for maintenance and working.

25th July 1881—Contract modifying that of 1880.

The general conditions of the contracts are as follows:—

Government aid.—Government guaranteed the payment of a subsidy, not exceeding in any year Rs. 80,000 twelve months after the opening of the main line or after each succeeding twelve months until the end of twenty years after opening, equal, together with the net earnings of the main line, to 5 per cent. of the paid up capital of the main line. Government similarly guaranteed a subsidy for the Makum branch, not exceeding Rs. 20,000 in any year. The payment of guarantee terminated on the 30th June 1903. The free use of public roads is also provided for.

Currency of contract.—If the Company fails to fulfil its obligations, within thirty days after notice, Government can take possession and execute all repairs and works for the efficient working of the railway. Government may determine the contract, on giving 12 months' notice (clause 19 of contract, dated 26th May 1880), at the expiry of the first five years after date of opening, and at subsequent intervals of five years, by paying twenty per cent. in excess of the value of the Company's property.

NOTE.—The Company having waived all its rights under clause 7 of contract dated 25th July 1881 to construct railways within the Lakhimpur District, Government have waived their right to purchase the railway before 1921, or at intervals of 10 years thereafter (Secretary of State's letter No. P. W. 2731, dated the 23rd December 1901).

Power of Company to surrender contract.—Nil.

Terms of working.—The Company to maintain the railway and the road on which the rails are laid and the rolling stock and other equipments to the satisfaction of the Secretary of State and to carry on the work of common carriers.

Rates and fares.—These were subject to approval by Government from time to time while subsidy was payable. If the net profits exceed 12 per cent. of paid up capital, Government may order such reduction of tariff and rates as may be considered necessary, such reduction not lessening the net profits below 12 per cent.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from local Government.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1883	22,22,253	48,220	—35,375	...	...	—35,375	...	52	171·70	
1884	40,65,283	2,06,133	—68,406	...	54,550	—13,856	...	67	131·61	
1885	49,46,729	2,57,395	—63,864	...	54,500	—9,364	...	62	123·03	
1886	49,73,753	3,46,479	53,154	1·07	54,654	1,07,808	2·17	81	80·65	
1887	53,32,605	4,01,928	1,02,540	1·92	1,00,000	2,02,540	3·80	94	74·68	
1888	53,73,445	4,25,530	1,01,759	1·89	1,00,000	2,01,759	3·75	105	76·09	
1889	55,18,750	4,61,018	1,25,147	2·27	1,00,000	2,25,147	4·08	114	72·26	
1890	57,06,682	5,14,266	1,76,960	3·10	1,00,000	2,76,960	4·85	127	65·59	
1891	67,05,474	4,98,682	1,70,526	2·54	1,00,000	2,70,526	4·03	123	65·80	
1892	69,56,304	5,13,213	1,63,719	2·35	1,00,000	2,63,719	3·79	127	68·10	
1893	71,70,562	5,12,698	1,52,972	2·13	1,00,000	2,52,972	3·53	127	70·13	
1894	70,97,487	5,31,645	1,95,732	2·76	1,00,000	2,95,732	4·17	132	63·18	
1895	74,02,729	6,01,142	2,69,543	3·64	1,00,000	3,69,543	4·99	149	55·16	
1896	74,01,496	6,47,360	3,12,286	4·22	1,00,000	4,12,286	5·57	161	51·76	
1897	74,20,119	7,74,189	2,64,750	3·57	1,00,000	3,64,750	4·92	192	68·12	
1898	74,40,474	7,81,415	2,82,478	3·80	50,000	3,32,478	4·33	194	63·85	
1899	74,56,183	8,59,414	4,49,688	6·03	37,978	4,87,666	6·54	213	47·68	The amount shown as subsidy received during 1899 was due for a previous period.
1900	77,14,349	9,00,847	4,62,381	5·99	...	4,62,381	5·99	224	48·67	
1901	82,00,747	9,28,578	4,73,307	5·77	...	4,73,307	5·77	230	49·03	
1902	82,00,694	8,51,880	4,11,187	5·01	...	4,11,187	5·01	211	51·73	
1903	82,32,530	9,16,777	4,57,974	5·56	...	4,57,974	5·56	227	50·05	
1904	87,01,363	9,48,473	4,21,317	4·84	...	4,21,317	4·84	235	55·58	
1905	87,31,147	9,54,293	4,32,053	4·95	...	4,32,053	4·95	237	54·73	

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 17}{\text{Sub-heads } (a) \text{ and } (b)}$. **DIBRU-SADIYA RAILWAY SYSTEM—*concld.***

17. (*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3½″ gauge)—

The line was used originally only for the purposes of bringing coal from the mines on the south bank of the Dihing river to the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Details of construction—

The line is 8·50 miles long, *viz.*, main line (Dihing bridge to Ledo) 5·50 miles, and branch (Margherita to Namdang) 3 miles. The main line was opened in 1884 and the branch in 1901.

Permanent-way.—The line is laid with 50-lb. flat-footed steel rails on uriam sleepers.

Ballast.—The main line is three-fourths ballasted with broken stone, but the Namdang branch is unballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 800 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The railway is worked under the following contract:—

Contract of—30th July 1881, between the Secretary of State and the Assam Railways and Trading Company, for coal and iron mining in the Makum coal fields and for the construction of a railway or tramway to effect a junction with the railways which may be constructed to the bank of the Dihing river.

Terms—Contained in Government of India, Public Works Department, No. 623 R. T., dated the 6th August 1896.

The general conditions are as follows:—

Government aid.—Nil.

Currency of contract.—The coal concession is for a term of 20 years from 30th July 1881 within an area of 30 square miles, and for a further term of 30 years within an area of at least 4 square miles.

Power of Company to surrender contract.—Nil.

Terms of working.—The colliery to be charged with the cost of maintenance of the branch and sidings owned by it and 5 per cent. of its gross earnings for the use of rolling stock; all other charges for working the open line to be divided between the railway and colliery in proportion to their respective gross earnings.

Rates and fares.—Certain rates and fares have been sanctioned by Government.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1897	11,46,240	45,871	8,024	0·70	33	82·51
1898	12,00,698	55,313	3,752	0·31	142	93·22
1899	12,83,416	63,084	22,053	1·72	162	65·04
1900	12,84,375	65,724	17,981	1·40	169	72·64
1901	16,30,162	70,293	11,145	0·68	123	84·15
1902	16,53,446	58,259	437	0·03	102	99·25
1903	16,62 082	59,077	—8,208	...	103	113·89
1904	16,62,088	56,108	13,158	0·79	120	76·55
1905	16,78,156	59,439	27,210	1·62	127	54·22

Number $\frac{\text{Main head } 18}{\text{Sub-heads } (a) \text{ to } (c)}$. **JODHPUR-BIKANER RAILWAY SYSTEM—**

Lines comprising the system.—The Jodhpur-Bikaner railway system is made up of—

	Open line. Miles.
(*a*) Jodhpur-Bikaner (Jodhpur section) (3′ 3½″ gauge)	463·89
(*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3½″ gauge)	245·35
(*c*) Jodhpur-Hyderabad railway (British section) (3′ 3½″ gauge)	123·98
Total	833·22

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) to (c)}}$. **JODHPUR-BIKANER RAILWAY SYSTEM—*contd.***

18. (*a*) Jodhpur-Bikaner (Jodhpur section) (3′ 3⅜″ gauge)—

Details of construction—

The open mileage of the section is 463.89 miles. First sanction to construction was accorded in 1881 and the line was opened through to the British frontier in 1900. The Merta city branch was opened in 1905.

Permanent-way.—The line is laid with 36-lb., 41¼-lb. and 50-lb. flat-footed steel rails. There are also some 36-lb. iron rails in the Merta city branch. The sleepers are steel trough, deodar and pine.

Ballast.—On the greater portion of the line the ballast consists of coarse sand, kunkur and broken stone.

Fencing.—With the exception of a few stations, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

The railway is worked under the following contracts :—

Contracts of—13th July 1889 } (between the Government of India and the Jodhpur and Bikaner Durbars) for
30th July 1889 } constructing and working the line.

The general conditions of the contracts are as follows :—

Government aid.—The line is the exclusive property of the two Durbars.

Currency of contracts.—These contracts may be modified at any time by mutual consent.

Terms of working.—Each Durbar to receive all the profits of the section of line belonging to that Durbar.

Rates and fares.—No provision was made for rates and fares in the contracts, but certain rates and fares were approved by executive order.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1883	4,99,866	40,361	23,110	4·62	42	42·76
1884	8,09,995	64,262	31,748	3·92	39	50·59
1885	15,40,335	1,70,691	1,12,505	7·30	54	34·20
1886	21,22,593	2,05,728	1,33,318	6·23	63	35·20
1887	22,81,433	3,18,703	1,91,677	8·40	85	39·86
1888	22,80,006	3,60,803	1,91,556	8·40	56	46·91
1889	22,78,978	3,59,358	1,92,258	8·45	56	46·50
1890	22,78,338	3,70,825	1,96,192	8·63	58	47·09
1891	41,87,110	6,12,839	3,34,364	7·99	66	45·44
1892	60,59,552	9,46,980	5,28,941	8·73	74	44·14
1893	64,74,611	8,81,765	4,33,695	6·70	52	47·83
1894	64,49,374	10,81,156	6,69,373	10·38	65	38·09
1895	64,82,934	9,74,738	5,69,246	8·85	58	41·60
1896	64,78,528	11,64,465	7,38,273	11·40	70	36·60
1897	74,90,176	11,22,658	7,44,799	9·94	67	33·66
1898	1,00,85,594	12,22,726	7,30,956	7·25	73	42·23
1899	1,13,42,183	19,09,997	11,66,244	10·29	102	38·93
1900	1,14,98,508	16,28,473	9,07,480	7·94	81	44·27
1901	1,17,24,896	15,67,073	7,14,326	6·10	66	54·39
1902	1,18,69,424	16,76,216	8,35,202	7·04	71	50·17
1903	1,19,31,439	16,34,708	8,91,196	7·47	69	45·48
1904	1,21,90,840	16,87,624	9,58,365	7·86	71	43·21
1905	1,23,63,774	19,16,254	11,01,294	8·92	79	42·53

18 (*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3⅜″ gauge)—

Details of construction—

The section is 245·35 miles long. Its construction was first sanctioned in 1890 and it was opened through to Bhatinda in 1902.

Permanent-way.—The permanent-way consists of 36-lb. flat-footed steel rails on steel trough and deodar sleepers.

Ballast.—The ballast consists of coarse sand and small kankur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is unfenced, except at a few stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contracts—

See under Jodhpur section, 18 (*a*).

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 18}}{\text{Sub-heads (a) to (c)}}$. **JODHPUR-BIKANER RAILWAY SYSTEM—*concld.***

18. (*b*) Jodhpur-Bikaner (Bikaner section) (3′ 3½″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	4,15,590	...	...	...	...	...
1891	14,32,706	5,189	2,724	0·19	36	46·99
1892	9,48,622	76,547	24,904	2·63	34	67·47
1893	9,65,771	66,725	25,735	2·66	30	61·43
1894	9,69,407	80,274	40,147	4·17	35	49·61
1895	9,71,084	86,539	45,096	4·64	38	47·89
1896	9,73,294	1,20,727	75,382	7·75	53	37·56
1897	9,73,473	1,17,010	65,504	6·73	52	44·02
1898	23,14,152	1,37,472	77,616	3·35	31	43·54
1899	28,61,917	1,74,539	1,04,344	3·65	37	40·22
1900	32,60,432	1,92,358	1,04,962	3·22	43	45·43
1901	48,93,535	2,46,375	1,05,697	2·16	30	57·18
1902	52,49,339	3,22,022	1,42,580	2·72	30	55·72
1903	51,30,925	5,25,329	2,66,197	5·19	41	49·33
1904	50,93,549	7,23,901	4,05,677	7·96	57	43·96
1905	51,72,406	8,83,432	5,62,383	10·87	69	36·34

18 (*c*) Jodhpur-Hyderabad (British section) (3′ 3½″ gauge)—

Details of construction—

The line connects Hyderabad (Sind) with the Jodhpur system and is 123·98 miles long. Its construction was first sanctioned in 1891 and it was opened through in 1900.

Permanent-way.—The section is laid with 60-lb. iron, and 50-lb. and 41¼-lb. flat-footed steel rails on deodar and Denham-Olpherts' cast-iron sleepers.

Ballast.—The ballast is of kunkur, stone and broken brick.

Fencing.—With the exception of a few stations, the line is unfenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 150.

Terms of contract—

The railway is worked under the following agreement:—

Agreement of—22nd December 1900 (between the Government of India and His Highness the Maharaja of Jodhpur and the Council of Regency, Bikaner) for the construction of a railway, on the 3′ 3½″ gauge, from Balotra to Hyderabad and for working the section from the Jodhpur Frontier to Hyderabad.

The general conditions of the agreement are as follows:—

Currency of agreement.—As regards the working of the railway, this agreement remains in force until determined by either party, on 12 months' notice on the 1st day of January or the 1st day of June in any year.

Terms of working.—Working expenses, excluding maintenance, are divided between the British and Native State sections in the ratio of the gross earnings of each section. Maintenance charges to be actual cost for each section of line.

Rates and fares.—Maximum and minimum rates and fares and the classification in force on the North Western (State) railway from time to time to be in force on the British section.

NOTE.—Government of India, in letter No. 255 R. T., dated the 6th March 1900, approved of the Rajputana-Malwa railway classification of goods which is in force on the Native State section being adopted on the British section, the stipulation in agreement requiring the adoption of the North Western (State) railway classification remaining unaltered in case it may be considered desirable to enforce it hereafter.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1891	2,31,401	...	...	...	5,356	−5,356	...	...	
1892	16,31,818	33,206	−1,994	...	59,649	−61,598	29	105·87	The figures of capital outlay in 1900 include the outlay on the Hyderabad-Rahoki section.
1893	16,61,091	1,30,817	16,471	0·99	65,767	−49,296	43	87·41	
1894	17,27,619	1,45,222	36,062	2·08	68,940	−32,878	47	75·17	
1895	17,74,095	1,68,139	46,609	2·63	71,080	−24,471	55	72·28	
1896	18,00,799	1,87,503	64,376	3·57	71,420	−7,044	61	65·67	
1897	18,37,796	2,05,182	59,413	3·23	73,552	−14,139	67	71·04	
1898	20,19,772	2,22,647	70,159	3·47	77,553	−7,394	73	68·49	The gain to the state in 1901 was due to the completion of the line which was previously only partially open.
1899	33,48,948	2,25,242	88,463	2·64	1,07,380	−18,917	74	60·73	
1900	41,71,400	1,93,211	65,933	1·10	1,78,984	−1,13,051	65	65·93	
1901	38,81,861	4,24,307	1,73,567	4·47	1,52,429	+21,138	66	59·09	
1902	40,45,972	5,04,008	2,18,814	5·41	1,59,771	+59,043	78	56·59	
1903	40,45,338	5,84,094	2,62,379	6·49	1,60,179	+1,02,200	91	55·08	
1904	39,58,081	6,48,728	3,45,006	8·72	1,54,846	+1,90,160	101	46·82	
1905	39,67,948	7,23,989	3,69,002	9·30	1,58,622	+2,10,380	112	49·03	

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main-head 19}}{\text{Sub-head (a)}}$. **MORVI RAILWAY** (3′ 3⅜″ and 2′ 6″ gauges)—

The 2′ 6″ gauge connection between Wadhwan and Rajkot by this railway has been converted to the 3′ 3⅜″ gauge—from Wadhwan to Thal, 31·84 miles, on a new alignment and onwards to Rajkot, 42·60 miles, on the original alignment with a few unimportant diversions. The line between Vankaner and Morvi has been retained on the 2′ 6″ gauge.

Details of construction—

The line is 89·64 miles long, divided into the 3′ 3⅜″ gauge section (Wadhwan to Rajkot), 73·94 miles and the 2′ 6″ gauge section (Vankaner to Morvi), 15·70 miles. The construction of the 3′ 3⅜″ gauge section was sanctioned in 1902 and this section was opened in 1905. The construction of the 2′ 6″ gauge section was sanctioned in 1883 and it was opened in 1887.

There were 2·75 miles sanctioned for construction in 1905.

Permanent-way.—The permanent-way on the 3′ 3⅜″ gauge section consists of 41½-lb. flat-footed steel rails on half-round teak and creosoted pine sleepers; and that on the 2′ 6″ gauge section consists of 29-lb. flat-footed steel rails on creosoted pine sleepers.

Ballast.—The line is ballasted with moorum (disintegrated) trap.

Fencing.—The line is unfenced.

Curves.—The sharpest curve on the 3′ 3⅜″ gauge is of 950 feet radius; and that on the 2′ 6″ gauge is of 300 feet radius.

Gradients.—The ruling gradient is 1 in 150 on both gauges.

Terms of contract—

The Morvi railway is owned by His Highness the Thakore Sahib of Morvi, and is under his control.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1886	6,88,671	34,822	Not available.	...	30	103·28
1887	11,06,500	1,29,407	16,994	1·54	39	86·87
1888	11,77,842	1,62,037	21,984	1·87	46	86·44
1889	12,46,800	1,77,321	56,727	4·55	50	68·01
1890	20,25,863	2,95,227	87,850	4·32	60	70·24
1891	20,55,599	3,09,419	1,08,617	5·28	63	64·90
1892	21,04,519	3,49,171	1,30,370	6·19	63	57·32
1893	21,57,865	3,22,818	1,45,782	6·76	66	54·86
1894	22,23,526	3,20,348	1,42,667	6·42	65	55·46
1895	23,99,396	3,69,972	2,00,127	8·34	75	45·91
1896	23,82,315	3,86,383	1,81,621	7·62	79	53·06
1897	24,76,757	4,27,483	2,11,642	8·55	87	50·49
1898	24,79,448	3,76,220	1,63,990	6·61	77	56·41
1899	25,06,414	4,20,486	1,70,053	6·78	86	59·56
1900	27,28,115	4,23,308	1,58,794	5·82	87	62·49
1901	27,59,452	3,58,663	1,25,534	4·55	73	65·00
1902	27,32,748	3,05,058	1,13,299	4·14	62	62·86
1903	27,88,452	2,98,066	1,44,749	5·19	61	51·44
1904	34,06,196	3,54,636	1,88,909	5·55	73	46·73
1905	43,90,817	3,23,640	1,74,476	3·97	69	46·09

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—**

Lines comprising the system.—The Rohilkund and Kumaon railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(a) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)	53·92	148·00	201·92
(b) Lucknow-Bareilly railway (3′3⅜″ gauge)	237·04	...	237·04
(c) Powayan Light railway (2′ 6″ gauge)	39·50	...	39·50
Total	330·46	148·00	478·46

Running powers—

Home line over foreign line—

	Miles.
Bhojeepura to Bareilly, Lucknow-Bareilly railway, for passenger and goods trains	12·00

Foreign line over home line—

Bengal and North-Western, Daliganj to Aishbagh, for passenger and goods trains	3·40

20 (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—

Details of construction—

The open line from Bhojeepura to Kathgodam is 53·92 miles long. Its construction was sanctioned in 1882 and it was opened in 1884.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

20. (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—*contd.*

Details of construction—*concld.*

There are 148 miles under construction, *viz.*, (1) the Bareilly-Soron branch, 56 miles; (2) Moradabad-Ramnagar branch, 47 miles; and (3) the Lalkua-Kashipur branch, 45 miles. The construction of these branches was sanctioned in 1903.

Permanent-way.—The permanent-way consists of 41½-lb. and 50-lb. steel rails on sâl sleepers.

Ballast.—The ballast consists of broken brick and shingle.

Fencing.—The line is partially fenced.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 70.

Terms of contracts—

The Rohilkund and Kumaon and Lucknow-Bareilly railways are worked under the following contracts :—

Contracts of—12th October 1882.—Rohilkund and Kumaon Railway Company's original contract.

8th September 1890.—Contract for the working and maintenance of the Lucknow-Bareilly railway and the Company's line as one system. (Principal contract.)

31st December 1892.—Relating to advances of capital by Government.

5th February 1901.—Contract modifying the terms of the previous contracts.

24th April 1903.—Contract as to rate of exchange for purposes of contracts of 12th October 1882 and 8th September 1890.

15th July 1904.—Contract for construction of new branches and taking over a branch from Kasganj to Soron and other matters supplemental to contracts of 1882, 1890, 1901 and 1903.

The general conditions of the contracts are as follows :—

Government aid.—Company's section.—Government guaranteed interest at 4 per cent. in sterling on the capital expended up to £200,000 until the line was opened for traffic, but not for longer than the first two years of the contract; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from date of opening, which ceased on 31st December 1894. Land was provided free, subject to the condition that the Company pays on demand to Government the cost price of land purchased by the latter subsequent to the date of the principal contract.

Lucknow-Bareilly section.—The Company to raise £160,000 capital by debentures which Government guarantee as to repayment of capital and payment of interest, the Company undertaking to reimburse Government from its own funds any amount by which the guarantee may exceed the annual limit of Rs. 96,000. Land was provided free of charge.

Note.—All sums to be advanced by Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum under the agreement dated the 5th February 1901.

Terms of contract.—The Lucknow-Bareilly section was taken over in an unfinished state by the Company which raised the sum of £160,837 by the issue of debentures for the purpose of completing it. The remainder of the capital expended has been supplied by Government. The contract provides that the railway shall be worked in conjunction with the Company's own line, a joint account of working expenses being kept and the total amount divided half-yearly between the State line and the Company's line in proportion to their respective gross earnings.

Currency of contracts.—

(1) *Rohilkund and Kumaon railway contract.*—Government may terminate the contract at the end of the 30th year (*i.e.*, on the 31st December 1912) or the 50th year (*i.e.*, on the 31st December 1932), by giving 12 months' notice. If the contract terminates by such notice or by efflux of time, Government have to pay 25 times the average net earnings, deducting the Government share of surplus profits during the 5 years preceding the termination. Government may also determine the contract at any time on six months' notice, if the Company fails to observe its obligations, on payment of the value of permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment in which case the Company must remove its property within nine months from the termination of the contract, otherwise it becomes the property of the Government.

(2) *Lucknow-Bareilly railway.*—Government may determine the contract on the 31st December 1907, or on the 31st December of any subsequent year, by giving twelve months' notice. In the event, however, of the original contract, dated the 12th October 1882, terminating by efflux of time or under notice of purchase or notice of determination, this contract, *ipso facto*, also terminates at the same time. Government may also terminate the contract if the Company fails to observe its obligations after six months' notice. On determination of the contract Government resume possession of the State railway on payment to the Company of the amount of the capital received, or take over its liabilities with respect to such capital.

Power of Company to surrender contract.—Nil.

Terms of working.—Company's section.—During the period that the Government are liable to pay interest, after deducting working expenses, (which may include any single item of capital expenditure, not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), the surplus

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (c)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.***

20. (*a*) Rohilkund and Kumaon railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

profits, after repayment of the guaranteed interest, go to the Company. Subsequently half the surplus profits, after 5 per cent. for the year (within a limit of £5,000 for each half-year), has been appropriated to the Company, are to be applied in repayment to Government of arrears of guaranteed interest and interest thereon. The other half and any ultimate surplus to belong to the Company. After the year ending 31st December 1897 Government are to receive half the surplus profits in excess of 6 per cent.

Note.—It has been agreed that, in calculating the surplus profits for division, sums received by the Company as its share of the surplus profits of the Lucknow-Bareilly railway shall not be taken into account.

Lucknow-Bareilly section.—The working expenses of the system, (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 20 for every mile of line open to traffic to be made half-yearly to Government for supervision), are divided between the Company's line and the State railway in proportion to their gross earnings, the profits of the State railway being applied (*i*) in meeting payment of interest on the debentures and of interest at 4 per cent. on any further capital supplied by the Company for the undertaking or advanced by Government; (*ii*) in payment to Government of interest at 4 per cent. on their capital in the undertaking; and (*iii*) the residue to be divided half-yearly between Government and the Company in the ratio of their respective shares of capital in the undertaking.

Any insufficiency of the profits to meet the charges under (*i*) that may be met by money supplied by Government shall be a cumulative preference charge against subsequent profits before division of residue.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Subsidy from Government.	Total income.	Percentage of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1884 .	19,10,266	36,543	1,734	0·09	....	1,734	0·09	51	95·16	In 1905 the increase in the Capital outlay is due to the inclusion of outlay on the branches under construction; and the decrease in net earnings, to heavy outlay on relaying the main line.
1885 .	21,71,124	2,38,572	40,153	1·85	40,000	80,153	3·69	68	66·40	
1886 .	22,52,962	3,00,191	88,832	3·72	40,000	1,23,832	5·50	86	58·75	
1887 .	22,91,619	3,19,274	76,800	3·35	40,000	1,16,800	5·10	92	63·42	
1888 .	23,40,100	3,31,093	1,02,120	4·36	40,000	1,42,120	6·07	96	57·46	
1889 .	23,96,624	3,72,270	1,20,135	5·01	40,000	1,60,135	6·69	107	56·98	
1890 .	20,37,223	3,14,834	1,11,003	5·45	40,000	1,51,003	7·41	90	52·04	
1891 .	20,49,458	3,85,084	1,33,440	5·62	20,000	1,53,440	7·49	112	58·22	
1892 .	20,58,575	5,20,567	1,57,780	6·82	40,000	1,97,780	9·61	127	54·17	
1893 .	20,82,280	4,25,909	1,43,180	6·17	40,000	1,83,180	8·80	124	56·78	
1894 .	20,80,410	4,59,315	1,75,191	7·16	40,000	2,15,191	10·34	134	52·91	
1895 .	20,78,251	4,04,504	1,52,973	7·36	...	1,52,973	7·36	118	62·18	
1896 .	20,79,868	4,26,905	1,54,595	7·43	...	1,54,595	7·43	125	63·79	
1897 .	21,20,428	4,23,720	1,73,184	8·17	...	1,73,184	8·17	124	59·33	
1898 .	21,42,552	4,62,308	2,21,899	10·36	...	2,21,899	10·35	135	52·24	
1899 .	21,48,313	4,55,623	2,34,020	10·89	...	2,34,020	10·89	136	49·74	
1900 .	31,53,125	4,37,572	2,24,048	10·59	...	2,28,048	10·59	156	48·64	
1901 .	22,09,423	3,84,314	2,09,896	9·50	...	2,09,896	9·50	112	45·38	
1902 .	23,36,911	4,10,626	2,18,317	9·37	...	2,18,317	9·34	146	46·83	
1903 .	25,89,790	4,13,147	2,20,405	8·51	...	2,20,405	8·51	121	46·65	
1904 .	43,55,575	4,18,737	2,24,403	5·15	...	2,24,403	5·15	122	46·41	
1905 .	93,34,589	4,40,664	1,54,126	*6·30	...	1,54,126	*6·30	128	65·02	* Calculated on capital outlay on open line.

20. (*b*) Lucknow-Bareilly railway (3′ 3⅜″ gauge)—

Details of construction:—

The open mileage is 237·04 miles, and is divided into main line (Lucknow to Bareilly), 198·55 miles and branches, 38·49 miles. Sanction to the construction of the main line was accorded in 1884 and it was opened through in 1891.

Permanent-way.—The permanent-way consists of 41½-lb. and 50-lb. steel rails on sál sleepers.

Ballast.—The ballast consists of broken bricks, kunkur and shingle.

Fencing.—The line is partially fenced.

Curves.—There is only one curve with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100 except on the Dudhwa branch where it is 1 in 60.

Terms of contracts—

See under Rohilkund and Kumaon railway proper, 20 (*a*).

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 20}}{\text{Sub-heads (a) to (e)}}$. **ROHILKUND AND KUMAON RAILWAY SYSTEM—*concld.***

20. (*b*) Lucknow-Bareilly railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Bareilly-Pilibhit, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.	Lucknow-Sitapur-Seramau, 3′ 3⅜″. Earnings per mile per week.	Pro: of exp: to earnings.	Lucknow-Bareilly, 3′ 3⅜″. Earnings per mile per week	Pro: of exp: to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.		Rs.	
1883	4,84,915	...	...	...	11,192	...	−11,192	...	...	...	...	...	...
1884	13,45,699	10,239	839	0·06	86,572	...	−85,733	32	91·81	...	...	...	...
1885	25,45,567	82,827	17,243	0·68	53,247	...	−36,004	44	83·79	...	...	...	...
1886	42,16,146	1,15,296	28,729	0·68	1,48,570	...	−1,19,841	53	77·46	45	76·29	...	...
1887	52,24,221	2,92,470	67,924	1·30	1,85,046	...	−1,17,122	53	71·47	46	73·49	...	...
1888	52,82,870	3,52,327	99,031	1·87	2,03,503	...	−1,04,472	50	70·31	47	70·81	...	...
1889	54,59,585	4,23,731	1,47,868	2·70	2,16,189	...	−68,321	59	66·45	59	65·10	...	...
1890	65,33,824	4,56,738	1,32,338	2·02	2,30,699	...	−98,361	64	66·08	62	72·78	...	...
1891	79,17,846	4,95,068	1,73,011	2·19	2,72,065	...	−99,054	...	...	...	...	56	65·05
1892	81,66,804	6,82,836	2,74,601	3·36	3,07,651	11,501	−44,551	...	...	...	...	66	59·72
1893	83,69,362	7,28,878	2,73,541	3·26	3,26,776	2,135	−55,364	...	...	...	...	67	62·29
1894	85,93,058	9,77,269	4,48,218	5·22	3,45,823	79,310	+ 23,585	...	...	...	...	87	59·25
1895	87,22,466	8,25,934	3,13,116	3·59	3,56,596	15,834	−59,314	...	...	...	...	74	61·90
1896	89,63,620	8,27,599	3,02,071	3·37	3,48,885	13,415	−60,229	...	...	...	...	75	63·32
1897	93,02,715	8,27,371	3,35,776	3·61	3,61,550	26,980	−52,754	...	...	...	...	69	50·42
1898	94,90,476	10,34,088	5,00,200	5·27	3,64,852	66,721	+68,627	...	...	...	...	94	51·62
1899	94,97,485	12,72,160	6,33,355	6·63	3,65,537	76,332	+ 1,91,486	...	...	...	...	114	50·21
1900	99,21,432	12,53,801	6,51,957	6·57	3,73,097	1,47,611	+ 1,31,249	...	...	...	...	107	48·72
1901	1,01,88,243	13,72,520	7,58,124	7·44	3,91,796	99,195	+ 2,67,133	...	...	...	...	123	44·76
1902	1,12,96,019	14,58,329	7,69,568	6·81	4,23,528	71,666	+ 2,74,374	...	...	...	...	132	47·05
1903	1,15,01,911	14,03,266	7,48,689	6·51	4,53,825	52,573	+ 2,42,291	...	...	...	...	126	46·65
1904	1,17,14,505	14,96,120	7,97,671	6·81	4,48,328	54,487	+ 2,94,856	...	...	...	...	133	46·68
1905	1,17,99,857	15,47,488	8,20,992	6·96	4,50,448	16,811	+ 3,53,733	...	...	...	...	138	46·95

20. (*c*) Powayan Light railway (2′ 6″ gauge)—

The line was constructed originally by the Powayan Steam Tramway Company and the maintenance and working were taken over by the Rohilkund and Kumaon Railway Company from 17th December 1900.

Details of construction—

This line, which connects Shahjahanpur with Mailani, is 39·50 miles long. Its construction was first sanctioned in 1889 and it was opened through in 1894.

Permanent-way.—The permanent-way consists of flat-footed steel rails, weighing 25 lbs. to the yard, laid on sál sleepers.

Ballast.—The line is ballasted with earth.

Fencing.—The line is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contracts—

The Powayan Light railway is worked under the following contracts:—

Contract of—1st July 1901 (between the Secretary of State and the Powayan Light Railway Company) for maintenance and working.

6th November 1902 (between the Secretary of State and the Rohilkund and Kumaon Railway Company) as to terms of working.

The general conditions of the contracts are as follows:—

Government aid.—Land.

Currency of contract.—The contract is terminable on the 31st December 1912 or any time thereafter on one year's notice being given by either party.

Terms of working.—The working agency is to retain 70 per cent. of the gross earnings until the line is fully equipped, and thereafter the same percentage as that at which the whole open system is worked, subject to a minimum of 60 per cent. The percentage so retained may include any single item of capital expenditure not exceeding Rs. 200, subject to a maximum charge of Rs. 20 per mile in each half-year.

Rates and fares.—The same rates and fares as may from time to time be applicable to the Lucknow-Bareilly railway.

Statistics of working.—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1901	8,41,038	66,862	20,059	2·39	33	70·00
1902	8,93,456	75,675	22,521	2·52	37	70·24
1903	8,94,619	71,815	28,482	3·18	35	60·34
1904	8,94,751	78,015	30,937	3·46	38	60·34
1905	8,94,751	92,614	36,707	4·10	45	60·37

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—**

Lines comprising the system.—The South Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) South Indian railway (3′ 3¾″ gauge)	1,123·05	20·83	1,143·88
(*b*) Karaikkal-Peralam railway (3′ 3¾″ gauge)	14·65	...	14·65
(*c*) Pondicherry railway (3′ 3¾″ gauge)	7·85	...	7·85
(*d*) Tanjore District Board railway (3′ 3¾″ gauge)	99·46	...	99·46
(*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3¾″ gauge)	50·48	...	50·48
(*f*) Tinnevelly-Quilon (Travancore) (Native state section) (3′ 3¾″ gauge)	57·98	...	57·98
Total	1,353·47	20·83	1,374·30

21 (*a*) South Indian railway proper (3′ 3¾″ gauge)—

Details of construction—

The total open mileage of the South Indian railway proper is 1,123·05 miles. This may be divided into (1) *Madras-Tuticorin section*, main line (Madras to Tuticorin), 446·80 miles; branches, 312·97 miles: (2) *Villupuram Dharmavaram section*, main line (Villupuram to Dharmavaram), 279·18 miles; Gudur branch, 84·10 miles. First sanction to the construction of (1) was given in 1859 and it was opened through in 1879. (2) was sanctioned in 1888 and opened through in 1892.

In addition to the above there are 11·83 miles under construction and 9 miles sanctioned for construction.

Permanent-way.—The rails in use are 50-lb. and 52-lb bull-headed steel, 56-lb. and 41½-lb. flat-footed steel, 40·3-lb. flat-footed and 68-lb. double-headed iron. The sleepers are cast iron pot, steel transverse and wooden.

Ballast.—The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

Fencing.—The line is fenced, with the exception of the Villupuram-Dharmavaram and Pakala-Gudur sections and the Pamban branch which are fenced only at stations.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on the length between Madras Beach and Fort and on the Villupuram-Dharmavaram, Pakala-Gudur, Trichinopoly-Madura, and Karur-Erode sections where it is 1 in 100.

Terms of contracts—

The railway is worked under the following contracts:—

Contract of—24th November 1890 (between the Secretary of State and the South Indian Railway Company) for working.

27th June 1901 (between the Secretary of State and the South Indian Railway Company) relating to the Pamban branch.

The general conditions of the contracts are as follows:—

Terms of contract.—The original South Indian Railway Company ceased to exist at the end of 1890, when the railway was purchased by the State. The purchase was effected by means of a cash payment to the Company, and all the contracts then subsisting between the Secretary of State and the Company were determined. The purchase price was £4,197,557.* The Secretary of State assumed all liability in connection with the Company's debentures and debenture stock which is irredeemable. The present Company (practically the old one in a modified form) was constituted, with a capital of £1,000,000, as the agency for carrying on the working of the lines after their acquisition by the Government, and for completing a system of State lines which was under construction by the former Company at the date of the termination of its contract. Any further moneys required are provided either by the Secretary of State or raised by the Company under guarantee. Subject to the provision of the contract, all moneys paid by the Company become the absolute property of the Secretary of State.

	£
* Company's stock at date of purchase ...	3,208,280
Premium	989,277
	4,197,557

Currency of contract.—Government may determine the contract on the 31st December 1910 or at the end of any succeeding fifth year, giving 12 months' previous notice. Government may also determine it, by giving six months' notice, should the Company fail to observe its obligations or the line be worked at a loss for not less than three half-years continuously. On the expiration of the contract Government are to take possession of the railway and all its appliances, repaying at par to the Company its capital of £1,000,000 and any further capital raised by it and paid to Government.

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year, and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government) the net receipts to be applied in payment to Government of the equivalent in rupees of interest at 3 per cent. on £1,000,000, the Company's capital; at 4½ per cent. on £425,000, the irredeemable debenture stock of the old Company; at 3½ per cent. on the debenture stock issued and upon the principal moneys owing in respect of advances made for the Pamban branch; and 3 per cent. on the net expenditure shown by the capital advance, stores and capital accounts. After deducting the equivalent in rupees of the sums referred to above, the residue, if any, to be divided between Government and the Company in the ratio of the respective capital amounts contributed by each.

Rates and fares.—Certain maxima and minima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads } (a) \text{ to } (f)}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21 (*a*) South Indian railway proper (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Table I [including the Tinnevelly-Quilon (Travancore) railway (British and Native State sections) up to 1904].								Table II (including the Pondicherry railway up to 1904).					
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.	Calendar year.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.			Rs.	
1879.	4,41,96,588	33,62,067	10,63,253	2·40	20,95,206	...	−10,31,953	1861.	77	47·45	1887.	148	68·20
1880.	4,46,77,075	35,59,593	9,30,017	2·08	21,28,643	...	−11,98,626	1862.	61	44·43	1888.	159	68·98
1881.	4,52,22,730	37,55,668	12,37,726	2·73	21,30,568	...	−8,92,842	1863.	74	44·60	1889.	167	70·11
1882.	4,53,69,280	37,58,714	14,02,328	3·09	21,40,871	...	−7,38,543	1864.	69	57·55	1890.	181	57·50
1883.	4,53,97,614	38,69,668	13,22,334	2·91	21,46,579	...	−8,24,245	1865.	79	49·53	1891.	154	65·47
1884.	4,67,51,662	41,89,049	14,93,491	3·19	25,40,471	...	−10,47,980	1866.	106	49·28	1892.	137	63·01
1885.	4,93,74,900	45,60,126	15,81,714	3·20	27,02,145	...	−11,20,431	1867.	86	49·66	1893.	149	61·25
1886.	5,15,40,172	49,20,176	14,75,914	2·86	26,80,496	...	−15,04,582	1868.	90	48·64	1894.	148	58·99
1887.	5,40,64,399	51,79,324	15,86,729	2·89	31,25,720	...	−15,38,991	1869.	84	51·44	1895.	165	56·13
1888.	5,57,91,978	56,58,683	16,31,692	2·92	33,80,057	...	−17,48,365	1870.	84	62·40	1896.	165	54·89
1889.	6,25,01,638	59,39,378	17,63,111	2·82	35,29,935	...	−17,66,824	1871.	84	55·61	1897.	170	53·01
1890.	7,27,15,494	64,25,510	26,57,305	3·66	25,19,564	1,43,341	−9,95,600	1872.	87	56·87	1898.	157	54·50
1891.	7,72,11,805	70,36,756	23,58,724	3·05	35,89,736	...	−12,31,012	1873.	120	49·99	1899.	159	52·41
1892.	7,62,83,761	77,14,996	27,77,005	3·55	39,51,093	...	−11,74,088	1874.	101	60·81	1900.	166	50·27
1893.	7,63,31,043	80,92,415	30,34,332	3·98	38,58,152	...	−8,23,820	1875.	96	48·16	1901.	188	46·17
1894.	7,64,13,362	80,46,559	32,83,865	4·30	42,81,812	1,06,449	−11,04,396	1876.	90	53·27	1902.	189	45·60
1895.	7,66,38,604	89,14,947	38,96,987	5·07	42,77,578	2,55,271	−6,35,862	1877.	107	50·88	1903.	208	39·99
1896.	7,67,63,325	89,45,581	40,27,489	5·25	40,60,677	2,51,567	−2,84,755	1878.	102	66·65	1904.	214	44·35
1897.	7,66,46,858	91,81,409	42,96,757	5·61	38,76,142	3,25,390	+ 95,225	1879.	105	68·38	1905.	221	49·51
1898.	7,45,21,873	84,67,581	38,35,527	5·15	37,49,521	3,06,473	−2,20,467	1880.	106	73·87			
1899.	7,58,82,623	84,74,462	39,88,540	5·28	36,39,891	2,45,608	+ 98,041	1881.	109	67·04			
1900.	7,69,70,119	89,04,825	43,97,986	5·71	36,77,879	3,68,408	+3,51,629	1882.	109	62·69			
1901.	8,23,78,918	1,01,44,657	54,15,176	6·57	37,23,736	4,59,540	+12,31,900	1883.	112	65·33			
1902.	8,49,97,226	1,05,08,232	57,14,254	6·72	39,64,367	4,80,185	+12,69,702	1884.	122	64·18			
1903.	8,69,72,143	1,23,82,517	73,77,644	8·48	40,28,068	6,96,450	+26,53,126	1885.	132	65·12			
1904.	10,01,55,636	1,28,18,085	71,16,981	7·11	45,90,992	7,05,488	+18,20,501	1886.	143	69·78			
1905.	8,62,95,191	1,29,34,476	65,77,350	7·65	27,08,867	6,30,604	+32,37,859						

21. (*b*) Karaikkal-Peralam railway (3′ 3⅜″ gauge)—

The line is partly in British and partly in French territories and was constructed (by the agency of the South Indian Railway Company) with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

Details of construction—

The line is 14·65 miles long. Its construction was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on wooden and steel transverse sleepers.

Ballast.—The line is ballasted with laterite.

Fencing.—The line is fenced only at stations.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—27th March 1902 (between the Government of the French Settlements in India and the South Indian Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—The land occupied by the portion in British territory has been made over by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

Currency of contract.—The contract is terminable by either party giving twelve months' notice to expire on the 30th June or 31st December in any year.

Terms of working.—The line is worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, *plus* 5 per cent. of the gross receipts of the line for the use of the main line rolling-stock and Rs. 1,500 per annum for interest on the main line Revenue stores and Stores and Workshop buildings and machinery. If, at any time, the Company can show that the working of the railway involves an actual loss on the percentage term the Government of the French Settlements in India have to make good the loss.

Rates and fares.—Same as on the South Indian railway system.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21. (*b*) Karaikkal-Peralam railway (3′ 3¾″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	4,759	...	...	...	...	...
1896	59,009	...	...	...	...	...
1897	5,93,082	...	...	...	...	...
1898	7,21,665	19,733	7,855	1·09	27	60·19
1899	7,25,344	27,685	9,037	1·25	37	67·36
1900	7,29,715	24,608	9,478	1·30	32	61·48
1901	7,23,786	30,450	13,314	1·84	40	56·28
1902	7,23,786	32,736	14,619	2·02	43	55·34
1903	7,23,786	38,933	19,864	2·74	51	48·98
1904	7,23,786	36,945	—29,432	...	48	179·66
1905	7,23,786	36,922	4,406	0·61	48	88·07

21. (*c*) Pondicherry railway (3′ 3¾″ gauge)—

The line is in French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian railway) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the French territory.

Details of construction—

The line is 7·85 miles long. Its construction was sanctioned in 1878 and it was opened in 1879.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers and with 41¼-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced.

Curves.—The sharpest curve is of 495 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The railway is worked under the following contract :—

Contract of—30th December 1890 (as renewed, between the South Indian Railway Company and the Pondicherry Railway Company) for working the line.

The general conditions of the contract are as follows :—

Currency of contract.—The contract will be terminable by either party on giving 6 months' notice expiring on the 31st December in any year.

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking including the Pondicherry railway.

Rates and fares.—Same as on the South Indian railway.

Statistics of working—

Calendar year.	Table I. Capital outlay.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
1879 to 1889	Rs. Information	Rs. not available.	Rs.		Rs.	
1890	5,68,543	...	...	...		
1891	5,68,543	20,106	20,107	3·54		
1892	5,68,543	15,341	15,341	2·70		
1893	5,68,543	18,014	18,014	3·17		
1894	5,68,543	27,958	18,425	3·24		
1895	5,68,543	50,328	22,711	3·99		
1896	5,68,543	39,681	17,776	3·13		
1897	5,68,543	36,592	17,169	3·02	Included with Indian railway proper.	
1898	5,68,543	31,880	14,394	2·53		
1899	5,68,543	45,305	21,627	3·80		
1900	5,68,543	59,583	23,193	4·08		
1901	5,68,543	60,174	32,366	5·69		
1902	5,68,543	70,478	37,960	6·68		
1903	5,68,543	73,416	44,258	7·78		
1904	5,68,542	60,119	33,662	5·92		
1905	5,68,543	58,414	29,837	5·25	143	48·94

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21. (*d*) Tanjore District Board railway (3′ 3⅜″ gauge)—

This railway was constructed by the agency of the South Indian Railway Company, and the money for the railway was raised by the imposition, with the concurrence of the inhabitants or their representatives on the District Board, of a special cess of 3 pies in the rupee on all lands which would be served by the railway or benefited by its construction. It was entirely a new departure, and has opened the way for the provision of railways for which Government are unable to find the money immediately, either by the District Board itself raising the capital when the cess is sufficient for this purpose, or by giving a guarantee to a company.

Details of construction—

The open mileage (Mayavaram to Arantangi) is 99·46 miles. Construction was first sanctioned in 1890 and the line was opened through in 1903.

Permanent-way.—The line is laid with 41½-lb. flat-footed steel and 40·3-lb. flat-footed iron rails on sâl, pyinkado, west coast teak and jarrah sleepers.

Ballast.—The Mayavaram-Mutupet section is ballasted with laterite and the Mutupet-Arantangi section is being ballasted with laterite over sand.

Fencing.—The line is fenced only at stations.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 200, except between Adirampatnam and Pattukkottai where it is 1 in 160.

Terms of contract—

The railway is worked under the following contract:—

Contract of—22nd July 1897 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—Land was provided free of cost.

Terms of contract.—The funds for the Mayavaram-Mutupet section were in the first instance provided in equal proportions by the Government of Madras from Provincial Revenues and by the Tanjore District Board from its railway guaranteed fund created by a special local cess. On the 1st January 1900 the Tanjore District Board took over the Government section and became sole owners—the purchase money, Rs. 12,34,720, being treated as a loan at 4 per cent. per annum. The extension of the line is being carried out by the South Indian Railway Company at the cost of the Tanjore District Board.

Currency of contract.—Contract to remain in force until either party gives 12 months' notice expiring on the 31st December in any year. The Government of India reserve the right of taking over the whole of the railway at any time, on 12 months' notice, by assuming liability for any debentures which the District Board may have issued and by repayment of any further amounts which it may have spent out of its railway guaranteed fund. Under ordinary circumstances this condition will not be enforced up to 31st December 1920 (Government of India No. 303 R. C., dated 5th March 1898).

Terms of working.—The line is worked for the same percentage of gross receipts as obtains on the undertaking (which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), *plus* 5 per cent. of the gross receipts of the line for use of rolling-stock, and all other charges properly debitable to revenue.

Rates and fares.—To be agreed upon from time to time between Government and the Company within the maxima and minima in force on the undertaking.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1890	61,509	...	...	...	1,230	—1,230	...	...
1891	4,82,149	...	...	...	10,873	—10,873	...	...
1892	13,84,423	...	...	...	37,331	—37,331	...	...
1893	21,62,957	...	...	...	70,947	—70,947	...	...
1894	23,79,123	1,63,460	62,942	2·65	1,00,701	—37,759	103	61·50
1895	24,47,438	2,42,024	93,669	3·83	95,700	—2,031	86	61·30
1896	24,49,680	2,47,772	99,361	4·06	97,861	+1,500	88	59·90
1897	24,91,354	2,56,081	1,11,496	4·47	99,159	+12,337	95	58·10
1898	24,94,905	2,46,199	77,627	3·11	99,843	—22,216	88	68·47
1899	24,97,355	2,42,016	96,798	3·88	99,845	—3,047	86	60·01
1900	26,50,776	2,32,280	97,782	3·69	1,02,734	—4,952	83	32·02
1901	32,17,511	2,90,637	1,35,765	4·22	1,38,681	—3,076	103	53·29
1902	38,18,202	3,08,879	1,46,764	3·84	1,63,157	—16,393	103	52·48
1903	45,70,190	3,90,747	2,09,167	4·58	1,97,476	+11,691	106	46·47
1904	46,32,763	5,24,490	2,61,364	5·64	2,25,868	+35,496	101	50·17
1905	47,33,090	5,86,680	2,65,302	5·61	2,21,234	+44,068	113	54·78

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 21}}{\text{Sub-heads (a) to (f)}}$. **SOUTH INDIAN RAILWAY SYSTEM—*contd.***

21. (*e*) Tinnevelly-Quilon (Travancore) (British section) (3′ 3⅜″ gauge)—

Details of construction—

The line is 50·48 miles long. Its construction was sanctioned in 1899 and it was opened in 1903.

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced at stations, and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Travancore branch is worked under the following contract :—

Contract of—27th June 1901 (between the Secretary of State and the South Indian Railway Company) for working.

The general conditions of the contract are as follows :—

Government aid.—Government guarantee interest on the debentures to be raised by the South Indian Railway Company for the construction of the line.

Currency of contract.—The contract will remain in force until the principal contract for working the undertaking shall terminate.

Terms of working.—The branch is to be worked for the same percentage of working expenses to gross earnings as obtains on the undertaking, subject to maintenance for the first two years after opening being charged to capital. After meeting interest charges, the residue of net earnings to be divided between the Secretary of State and the Company in the proportions in which the residue of net revenue receipts of the undertaking are divisible under the principal contract. If the net earnings are not sufficient to meet interest charges of any half-year, the deficiency attributable to the section of railway within the Native State of Travancore to be borne by the Secretary of State, and that attributable to the section of railway outside the Native State to be borne by the Secretary of State and the Company in the proportions in which the residue of such net revenue receipts would have been divisible between them had there been any such residue.

As between Government and the Native State of Travancore the latter has under-written the guarantee of interest to the extent of the capital required for the construction of the line lying in its State, any excess of net earnings over interest charges attributable thereto being made over to and any deficiency being met by the Native State.

Rates and fares.—Same as on the South Indian railway.

Statistics of working—

Calendar year.	TABLE I. Capital outlay to end of each year. British section.	Capital outlay to end of each year. Native State section.	Gross earnings.	Net earnings. British section.	Net earnings. Native State section.	Per cent. on capital outlay. British section.	Per cent. on capital outlay. Native State section.	Interest charges. British section.	Interest charges. Native State section.	Gain or loss. British section. South Indian Railway Company.	Gain or loss. British section. State.	Gain or loss. Native State section.	TABLE II. (Including the Native State Section.) Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1902	Included with the South Indian railway proper					...	...	...	...	...	...	...	81	44·34
1903													101	41·18
1904													85	51·04
1905	43,40,925	1,17,84,077	4,86,757	68,314	1,80,963	1·57	1·54	1,49,273	3,99,750	—13,234	—67,695	—2,18,787	86	48·78

21. (*f*) Tinnevelly-Quilon (Travancore) Native State section (3′ 3⅜″ gauge)—

Details of construction—

The Native State section is 57·98 miles long. Its construction was sanctioned in 1899 and it was opened through in 1904.

Permanent-way—The line is laid with 50-lb. bull-headed steel rails on cast iron pot sleepers, except for a length of 23·48 miles, between Ponalur and Shencottah, where there are wooden sleepers of jarrah, irul and teak.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced only at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient between Quilon and Ponalur is 1 in 100 and between Ponalur and Shencottah 1 in 50.

Terms of contracts—

The line is worked on the same terms as apply to the Tinnevelly-Quilon (Travancore) British section.

Statistics of working—

See under British section.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (l)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—**

Lines comprising the system.—The Southern Mahratta railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	*Total.
	Miles.	Miles.	Miles.
(*a*) Southern Mahratta railway (3′ 3⅜″ gauge)	1,042·04	...	1,042·04
(*b*) Bellary-Rayadrug railway (3′ 3⅜″ gauge)	33·35	...	33·35
(*c*) Birur-Shimoga railway (3′ 3⅜″ gauge)	37·92	...	37·92
(*d*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)	119·50	...	119·50
(*e*) Hindupur (Yesvantpur-Mysore frontier) railway (3′ 3⅜″ gauge)	51·35	...	51·35
(*f*) Hospet-Kottur railway (3′ 3⅜″ gauge)	43·06	...	43·06
(*g*) Kolhapur railway (3′ 3⅜″ gauge)	29·27	...	29·27
(*h*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)	15·80	...	15·80
(*i*) Mysore section (Southern Mahratta) (3′ 3⅜″ gauge)	296·22	...	296·22
(*j*) West of India Portuguese railway (3′ 3⅜″ gauge)	51·10	...	51·10
(*k*) *Beswada-Masulipatam railway (3′ 3⅜″ gauge).*	...	49·50	49·50
(*l*) *Sangli railway (3′ 3⅜″ gauge)*	...	4·00	4·00
Total	1,719·61	53·50	1,773·11

Running powers—

Home line over foreign line —

Tadepalli to Bezwada, Madras railway (North-East line) for passenger and goods trains . . . . . 2·99

22. (*a*) Southern Mahratta railway proper (3′ 3⅜″ gauge)—

Details of construction—

The open mileage of the Southern Mahratta Railway proper is 1,042·04 miles. This may be divided into (1) main line (Portuguese frontier to Tadepalli) 509·97 miles, and (2) branches, 532·07 miles. Construction was first sanctioned in 1879 and the main line was opened through in 1890.

Permanent-way.—The rails in use are of 41½-lb., 50-lb. and 62-lb. flat-footed steel. The sleepers are teak, jamba and steel trough.

Ballast.—The line is ballasted throughout the main line and Poona branch with stone, gravel and sand; the Harihar branch with stone, and the Bijapur branch with stone and gravel.

Fencing.—The line is only partially fenced.

Curves.—The sharpest curve on the main line is of 603 feet radius. The sharpest curve on the Poona branch is of 600 feet radius.

Gradients.—The ruling gradient is 1 in 100, except on the Ghats, between miles 0 and 3 on the main line, where the gradient is 1 in 40.

Terms of contracts—

The Southern Mahratta railway is worked under the following contracts :—

Contract of—1st June 1882.—Southern Mahratta Railway Company's principal contract.

28th October 1885.—Contract supplemental to that of 1882, for construction and working of the West Deccan railway.

31st August 1887.—Contract supplemental to those of 1882 and 1885, for construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

27th February 1889.—Contract supplemental to those of 1882, 1885 and 1887, for completion and working of the Bellary-Kistna railway.

The general conditions of the contracts are as follows :—

Government aid.—Interest in sterling on share capital at 3½ per cent. is guaranteed and an additional ½ per cent. until 31st December 1890.

Terms of contract.—The contract provides that the Company raise £5,000,000, and that any further moneys required shall be supplied by the Secretary of State.

Currency of contracts.—The contract is current for a period of 50 years. Government may however determine the contract after 25, 35 or 45 years (*i.e.*, on 30th June 1907, 30th June 1917, or 30th June 1927), on one year's previous notice; or on six months' notice given at any time if the Company fails to observe its obligations, or the line is worked at a loss. Upon determination of the contract by efflux of time or by notice Government have to repay to the Company the amount of the par value of the share capital paid to Government.

Power of Company to surrender contracts.—The Company may determine the contracts on the 30th June in any year, by giving one year's previous notice.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (i).}}$ **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22. (*a*) Southern Mahratta railway proper (3′ 3⅜″ gauge)—*concld.*

Terms of contracts—*concld.*

Terms of working.—Up to the 31st December 1890 after deducting working expenses (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor work,' subject to a maximum charge on such account of Rs. 23,000 in each half-year and a payment of Rs. 40 for every mile of line open to traffic to be made half-yearly to Government for supervision), the net receipts belonged to Government, unless one-fourth part of the same exceeded the extra guarantee of ½ per cent., in which case the amount of the excess was payable to the Company. After 31st December 1890 three-fourths of the net receipts are paid to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
1884	2,77,07,721	2,13,069	—18,131	...	14,77,196	...	—14,95,327	50	108·51
1885	3,63,00,076	8,66,226	1,40,238	0·38	19,81,340	...	—18,41,102	63	83·80
1886	6,15,07,620	16,34,918	4,88,392	0·79	26,43,220	...	—21,54,828	92	69·83
1887	7,87,73,165	30,32,417	10,03,624	1·27	34,64,086	...	—24,60,462	87	66·01
1888	8,68,84,288	38,38,616	8,35,493	1·01	31,89,505	...	—23,04,012	86	75·70
1889	9,18,52,133	40,31,604	9,61,618	1·04	32,91,520	41,700	—23,71,602	88	76·15
1890	9,32,85,016	44,71,095	9,14,664	0·98	31,39,444	30,036	—22,54,816	85	78·19
1891	9,42,66,041	47,60,567	16,29,919	1·73	35,89,351	2,58,845	—22,18,777	88	65·76
1892	9,61,10,671	44,33,107	18,47,999	1·40	31,85,511	3,43,266	—21,80,778	82	68·69
1893	9,45,71,662	57,29,918	23,16,567	2·45	35,42,479	5,34,949	—17,60,861	106	59·69
1894	9,51,44,496	58,50,542	20,18,567	2·12	45,57,598	5,57,556	—31,26,587	108	65·44
1895	9,56,02,591	64,68,011	25,88,948	2·71	46,80,290	5,22,407	—26,13,740	119	59·65
1896	9,60,94,788	67,12,230	29,11,959	3·03	44,45,740	7,23,698	—22,57,479	124	56·59
1897	9,67,12,888	64,92,310	27,82,625	2·88	43,62,886	6,97,133	—21,77,394	119	56·96
1898	9,74,67,550	50,61,871	15,02,414	1·54	41,10,275	5,44,277	—31,52,138	93	70·32
1899	9,78,60,569	58,70,616	18,95,002	1·94	40,10,557	3,85,332	—25,00,887	108	67·72
1900	9,82,62,274	64,06,526	22,83,366	2·32	40,02,119	5,81,807	—23,00,560	119	64·69
1901	9,84,64,118	58,29,471	17,31,134	1·75	40,42,851	4,92,728	—28,04,445	107	70·30
1902	9,85,18,731	64,59,086	23,09,908	2·34	40,79,645	5,03,168	—22,72,905	119	64·24
1903	9,88,51,177	66,72,302	25,50,721	2·58	40,94,983	6,01,133	—21,45,393	123	61·77
1904	9,91,33,895	73,48,458	26,97,722	2·72	41,08,930	7,20,960	—21,32,168	135	63·29
1905	10,13,29,322	76,67,700	30,16,473	2·98	41,37,632	6,20,764	—17,41,923	141	60·66

22. (*b*) Bellary-Rayadrug railway (3′ 3⅜″ gauge)—

The construction of the Bellary-Rayadrug railway by the agency of the Southern Mahratta Railway Company has been sanctioned with the object of increasing facilities for distributing food to the population in the Madras Presidency and of lessening the difficulties and troubles incidental to the period of scarcity.

Details of construction—

The line is 33·35 miles long. It was sanctioned in 1902 and opened in 1905.

Permanent-way.—The permanent-way consists chiefly of flat-footed steel rails, weighing between 41½ and 39 lbs. per yard, laid on teak, jamba and Australian eucalyptus sleepers.

Ballast.—The ballast consists of broken stone, sand and moorum.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The line is worked under an agreement (between the Secretary of State and the Southern Mahratta Railway Company) sanctioned under Government of India, Public Works Department (Railways) No. 1144 R. T., dated the 20th December 1904.

The general conditions of the agreement are as follows :—

Government aid.—The line is the property of Government.

Currency of agreement.—The agreement is terminable at the close of any calendar half-year on twelve months' notice being given by either party.

Terms of working.—Actual cost with a lump sum charge of 11¼ annas per train-mile for locomotive and carriage and wagon expenses and for Traffic expenses connected with subordinate superintendence, train staff, lighting and general stores, clothing, printing, stationery and tickets.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (l)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*contd.*

22. (*b*) Bellary-Rayadrug railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of the year.	Gross earnings.	Net earnings.	Percentage of net earnings on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
1905	Rs. 7,70,179	Rs. 17,040	Rs. —2,864	...	Rs. 14,102	Rs. —16,966	Rs. 19	116·81

22 (*c*) Birur-Shimoga railway (3′ 3⅜″ gauge)—

Details of construction—

The line is 37·92 miles long. Its construction was sanctioned in 1896 and it was opened in 1899.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails on Mysore teak sleepers. The Bhadra bridge is laid with 50-lb. flat-footed steel rails.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—The sharpest curve is of 1,500 feet radius.

Gradients.—The ruling gradient is 1 in 89.

Terms of contract—

The Hindupur and Birur-Shimoga railways are worked under the following contract :—

Contract of—2nd December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows :—

Government aid.—The lines are the property of the Mysore State.

Currency of contract.—Either party may determine the contract, on giving twelve months' notice, on the 31st December 1904, or on the 1st January or 1st July in any year thereafter. If not determined sooner, the agreement terminates, without prior notice, on the date the Mysore contract of the 31st August 1887 terminates. On the determination of the contract the Mysore Government resume possession of the railway and take over the liabilities incurred by the Company on behalf of the railway, and the working stores belonging to the railway, at a valuation.

Terms of working.—The working expenses of the system, excluding expenditure on New Minor Works, are divided between these railways and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Mysore Durbar.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1896	2,90,226	...	...	...	...	...
1897	6,27,263	...	...	...	...	...
1898	15,70,079	...	...	...	...	...
1899	20,85,475	6,186	1,881	0·09	37	69·59
1900	22,94,457	66,227	24,219	1·06	34	63·43
1901	24,01,388	62,058	16,993	0·71	31	72·62
1902	24,05,667	64,606	23,367	0·97	33	63·83
1903	24,07,802	61,520	24,206	1·01	31	60·65
1904	24,06,391	68,224	24,628	1·02	35	63·90
1905	23,98,543	80,672	31,102	1·30	41	61·45

22. (*d*) Guntakal-Mysore frontier railway (3′ 3⅜″ gauge)—

Details of construction—

The line is 119·50 miles long. Its construction was sanctioned in 1889 and it was opened in 1893.

Permanent-way.—The permanent-way consists of 4 1½-lb, flat-footed steel rails on steel trough sleepers.
Ballast.—The line is ballasted throughout with stone.
Fencing.—The line is partially fenced.
Curves.—The sharpest curve has a radius of 600 feet.
Gradients.—The ruling gradient is 1 in 100,

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (l)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22. (*d*) Guntakal-Mysore Frontier railway (3′ 3⅜″ gauge)—*concld.*

Terms of contract—

The Guntakal-Mysore Frontier railway is worked under the following contract:—

Contract of—21st August 1898 (between the Secretary of State and the Southern Mahratta Railway Company) for construction and working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of Government.

Currency of contract.—The same as in the case of the Southern Mahratta railway.

Power of Company to surrender contract.—The same as in the case of the Southern Mahratta railway.

Terms of working.—The working expenses of the entire system of railways worked by the Company (including this railway), exclusive of Government supervision charges of the Southern Mahratta railway and the Mysore section, are divided between this railway and the other railways worked in proportion to their gross receipts. This railway's share of the working expenses is retained from its gross receipts. The residue is paid to Government.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Table I.						Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1893	58,29,806	1,97,374	78,955	1·35	4,67,933	—3,88,978	38	60·00
1894	58,58,414	3,68,951	1,27,874	2·18	2,34,529	—1,06,655	59	65·34
1895	58,71,739	4,39,329	1,81,657	3·09	2,34,639	—52,982	71	58·65
1896	59,00,158	4,80,992	2,10,690	3·57	2,35,666	—24,926	77	56·20
1897	59,02,498	6,38,278	2,75,983	4·68	2,36,000	+39,983	103	56·76
1898	58,98,866	4,25,702	1,32,471	2·25	2,36,026	—1,03,555	69	68·88
1899	58,98,608	3,84,829	1,28,459	2·18	2,35,996	—1,07,537	62	66·62
1900	59,00,046	4,36,116	1,57,837	2·68	2,35,960	—78,123	70	63·81
1901	59,02,533	4,47,313	1,36,659	2·32	2,36,115	—99,456	72	69·45
1902	59,04,714	4,73,972	1,74,320	2·95	2,36,107	—61,787	76	63·22
1903	59,07,192	4,96,481	1,97,075	3·34	2,36,227	—39,152	80	60·31
1904	59,14,170	7,54,378	2,73,879	4·63	2,36,373	+37,507	121	63·69
1905	59,21,993	8,07,874	3,34,820	5·65	2,36,752	+98,077	130	58·55

22. (*e*) Hindupur (Yesvantpur-Mysore frontier) railway (3′ 3⅜″ gauge)—

Details of construction—

The line is 51·35 miles long. Its construction was sanctioned in 1890 and it was opened in 1893.

Permanent-way.—The rails on the ghat section are 50-lb. flat-footed steel, State railway type, and 41¼-lb. flat-footed steel on the remainder of the line. The sleepers are Mysore teak throughout.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 89 gradient on the ghat section.

Terms of contract.—See under Birur-Shimoga railway, 22 (*c*).

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	24,41,741	...	...	...	...	...
1893	24,46,186	57,635	22,708	0·93	38	60·60
1894	24,84,999	1,61,704	56,504	2·32	61	65·06
1895	24,19,698	1,92,159	79,886	3·30	72	58·43
1896	23,94,762	2,23,800	99,592	4·16	84	55·50
1897	24,79,210	2,69,527	1,18,358	4·77	101	56·09
1898	24,98,316	1,80,081	56,430	2·26	67	68·66
1899	24,98,162	1,49,363	50,528	2·02	56	66·17
1900	24,98,047	1,88,183	67,135	2·69	70	64·32
1901	24,94,729	1,97,798	60,724	2·43	74	69·30
1902	24,97,811	2,13,486	77,908	3·12	80	63·51
1903	24,97,206	2,42,695	96,159	3·85	91	60·38
1904	24,88,842	3,67,923	1,33,715	5·37	138	63·66
1905	24,88,944	3,73,993	1,54,972	6·22	140	58·29

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (l)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*contd.*

22. (*f*) Hospet-Kottur railway (3′ 3⅜″ gauge)—

The same remarks apply to it as are made against the Bellary-Rayadrug railway, 22 (*b*).

Details of construction—

The line is 43·06 miles long. Its construction was sanctioned in 1902 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails, on pine, jamba and teak sleepers.

Ballast.—The line is being ballasted with gravel and stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 575 feet radius.

Gradients.—The ruling gradient is 1 in 60.

Terms of contract—

The same as apply to the Bellary-Rayadrug railway, 22 (*b*).

Statistics of working—

Calendar year.	Table I. Capital outlay to end of the year.	Gross earnings.	Net earnings.	Percentage on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
1905	13,81,630	Rs 29,230	Rs. —6,975	...	Rs. 48,242	Rs. —55,217	17	123·86

22. (*g*) Kolhapur railway (3′ 3⅜″ gauge)—

Details of construction—

The line is 29·27 miles long. Its construction was sanctioned in 1888 and it was opened in 1891.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on steel trough sleepers.

Ballast.—The line is ballasted throughout with gravel and sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Kolhapur railway is worked under the following contract:—

Contract of—17th July 1891 (between the Kolhapur Durbar and the Southern Mahratta Railway Company) for maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Kolhapur State.

Currency of contract.—The contract may be terminated, upon six months' notice, by either party.

Terms of working.—The working expenses of the system, excluding Government supervision charges and New Minor Works, are divided between this railway and the others comprising the system in proportion to their gross earnings. The Company retains the share attributable to these lines (which includes any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), and pays the residue to the Kolhapur Durbar.

Rates and fares.—The same as in force on the Southern Mahratta railway.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1889	13,59,602	...	...	...	...	...
1890	21,37,699	...	...	...	...	...
1891	23,16,183	58,881	20,866	0·90	60	64·26
1892	23,81,946	90,393	29,182	1·23	55	67·72
1893	23,21,687	1,88,096	49,991	2·15	78	57·67
1894	23,05,817	1,23,330	43,632	1·89	82	64·64
1895	23,69,206	1,21,147	51,006	2·15	80	57·90
1896	23,05,912	1,21,655	54,305	2·35	80	55·36
1897	22,24,837	94,630	41,981	1·80	63	55·64
1898	23,24,807	78,271	24,201	1·04	52	69·08
1899	23,24,807	99,195	33,986	1·46	66	65·74
1900	23,24,807	1,24,215	44,875	1·93	82	63·87
1901	23,24,807	1,14,114	35,750	1·54	75	68·67
1902	22,25,587	1,23,913	46,407	2·00	81	62·55
1903	23,26,188	1,21,957	48,053	2·07	80	60·60
1904	23,26 251	1,41,676	53,228	2·29	93	62·43
1905	23,26,251	1,70,404	69,432	2 98	112	59·25

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 22}{\text{Sub-heads } (a) \text{ to } (i)}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*contd.*

22. (*k*) Mysore-Nanjangud railway (3′ 3⅜″ gauge)—

Details of construction—

The line is 15·80 miles long. It was opened in 1891.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails, mostly on Mysore teak with a mixture of jamba sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve has a radius of 700 feet.

Gradients.—The ruling gradient is 1 in 100.

Terms of contract—

The Mysore-Nanjangud railway is worked under the following contract:—

Contract of—14th December 1899 (between His Highness the Maharaja of Mysore and the Southern Mahratta Railway Company) for working.

The general conditions of the contract are as follows:—

Government aid.—The line is the property of the Mysore State.

Currency of contract.—The contract is terminable on the 1st January or 1st July in any year, on six months' notice by either party. If not terminated sooner, this agreement terminates on the date on which the Mysore contract of the 31st August 1887 terminates. On determination, the Company makes over to the Mysore Government the railway and works and pays to that Government all moneys on account of the railway, the Government indemnifying the Company against all debts and liabilities incurred on account of the railway then subsisting. The working stores, if mutually agreed upon, to be taken over by the Mysore Government at a valuation.

Terms of working.—After deduction of expenditure on new minor works, which is debited to each railway direct, from the total working expenses of the Company's railway system, the balance is divided between this railway and the other railways comprised in the Company's system in the proportion which the gross receipts of this railway bear to the gross receipts of such other railways, and the sum so ascertained, together with any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000, but not exceeding Rs. 2,000, classed as a 'Minor Work' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year, representing the working expenses of this railway, is retained by the Company, and the residue paid to the Mysore Government.

Rates and fares.—To be fixed by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1892	5,92,414	16,478	6,163	1·03	21	62·60
1893	6,18,551	33,812	14,001	2·26	43	58·59
1894	6,03,095	37,448	12,866	2·13	47	65·65
1895	6,09,212	39,160	16,432	2·69	49	57·98
1896	6,09,681	39,322	17,125	2·81	50	56·45
1897	6,34,764	33,497	14,265	2·25	42	57·41
1898	6,43,521	31,493	10,124	1·57	40	67·85
1899	6,46,651	16,810	5,671	0·88	21	66·26
1900	6,53,741	30,360	11,357	1·74	38	63·20
1901	6,56,462	26,302	7,863	1·20	35	72·22
1902	6,56,462	29,870	10,938	1·67	36	63·38
1903	6,56,462	31,923	12,687	1·93	39	60·26
1904	6,56,462	38,873	14,404	2·19	47	62·95
1905	6,56,462	44,174	18,015	2·74	54	59·22

22. (*i*) Mysore Section (Southern Mahratta) (3′ 3⅜″ gauge)—

Details of construction—

The line, which connects Mysore with Harihar, is 296·22 miles long. First sanction to its construction was given in 1877 and it was opened through in 1889.

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails, with the exception of about 25 miles which are laid with iron rails. The rails are laid on Mysore teak sleepers with a small proportion of jamba and steel trough sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is only partially fenced.

Curves.—The sharpest curve has a radius of 660 feet.

Gradients.—The ruling gradient is 1 in 100 between Harihar and Bangalore, and 1 in 70 between Bangalore and Mysore.

Terms of contract—

The Mysore section is worked under the following contract:—

Contract of—31st August 1887 (between the Secretary of State and the Southern Mahratta Railway Company) for construction, maintenance and working.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (i)}}$ **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*contd.*

22. (*i*) Mysore Section (Southern Mahratta) (3′ 3⅜″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions of the contract are as follows:—

Government aid.—Guarantee of interest in sterling at 4 per cent. on £1,200,000 debenture stock.

Terms of contract.—To meet the cost of constructing the Gubbi-Harihar extension, the Company raised £1,224,000, by the issue of debenture stock for the nominal amount of £1,200,000. The stock is redeemable on or after the 1st March 1936. The contract provides that the Company may raise £1,224,000, and that any further moneys required be supplied by the Secretary of State. All moneys whatsoever received by or on behalf of the Company in respect of the undertaking are the absolute property of the Secretary of State during the continuance of this contract.

Currency of contract.—Government may determine the contract at any time, on six months' notice, should the Company fail to observe its obligations, or the line be worked at a loss. It is also provided that should the Company's contract for the Southern Mahratta railway system be determined, then this contract will also be determined. On the termination of the contract, the Secretary of State, if so required by the Company, takes over all liabilities in respect of the debenture stock issued by the latter (which is not redeemable until the 1st March 1936).

Power of Company to surrender contract.—Nil.

Terms of working.—After deducting working expenses, (which may include any single item of capital expenditure not exceeding Rs. 1,000, or if exceeding Rs. 1,000 but not exceeding Rs. 2,000, classed as a 'Minor Work,' subject to a maximum charge on such account of Rs. 20 per mile of line open in each half-year), the net receipts are divided in proportion of three-fourths to Government and one-fourth to the Company.

Rates and fares.—To be fixed from time to time by the Company with the approval of Government.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Company's share of net earnings.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1879	7,98,213	...	...	...	23,960	...	—23,960	...	...
1880	21,37,736	...	...	...	68,908	...	—68,908	...	...
1881	36,56,345	1,31,525	53,753	1·47	98,912	...	—45,159	26	59·13
1882	45,95,658	2,86,390	1,03,495	2·25	1,68,939	...	—65,494	68	64·11
1883	57,69,957	3,02,895	99,675	1·73	2,19,351	...	—1,19,676	67	67·09
1884	62,64,620	3,61,448	1,65,479	2·64	2,41,052	...	—75,573	67	54·22
1885	64,89,346	4,33,954	2,07,784	3·20	2,51,730	...	—43,946	60	52·12
1886	71,35,111	4,69,274	1,05,385	1·48	5,57,104	...	—4,51,719	65	59·04
1887	91,36,188	5,13,784	1,41,198	1·55	6,70,864	...	—5,29,666	71	71·60
1888	1,25,76,692	5,70,657	52,295	0·42	6,94,210	...	—6,41,915	79	76·28
1889	1,24,24,093	8,96,273	2,22,034	1·54	7,07,500	47,964	—5,33,330	72	75·23
1890	1,47,11,610	11,86,318	2,61,700	0·02	6,48,733	52,831	—4,39,864	77	77·94
1891	1,50,76,285	13,24,525	4,43,717	2·94	6,54,850	96,004	—3,07,137	86	66·50
1892	1,46,86,205	13,99,468	4,47,996	3·06	7,20,624	1,01,305	—3,83,023	89	67·92
1893	1,46,42,217	16,85,203	6,74,705	4·61	7,70,439	1,64,670	—2,60,404	109	59·92
1894	1,47,66,293	14,45,412	4,76,156	3·23	8,38,525	1,43,566	—5,05,925	94	66·99
1895	1,49,22,452	15,78,281	6,30,769	4·23	8,70,947	1,23,096	—3,63,274	103	59·72
1896	8,51,08,257	15,84,981	6,76,873	4·48	8,21,588	1,71,768	—3,16,483	103	57·29
1897	1,51,99,757	18,80,019	7,95,147	5·23	7,75,708	1,80,992	—1,61,553	122	57·54
1898	1,55,07,319	13,92,851	4,13,421	2·67	7,38,461	1,66,986	—4,92,026	90	70·32
1899	1,56,75,416	10,60,469	3,29,033	2·10	7,21,117	76,861	—4,68,945	69	68·97
1900	1,58,70,510	13,76,391	4,71,201	2·97	7,18,200	1,11,070	—3,58,069	89	65·77
1901	1,60,14,879	14,33,240	4,07,791	2·55	7,22,224	1,07,697	—4,22,150	93	71·55
1902	1,60,76,009	15,97,046	5,58,082	3·47	7,21,062	1,16,979	—2,79,959	104	65·09
1903	1,62,34,903	15,35,270	5,32,298	3·59	7,20,000	1,46,896	—2,84,598	100	62·07
1904	1,62,59,794	15,85,324	5,63,667	3·47	7,20,000	1,52,391	—3,08,724	103	64·44
1905	1,64,76,981	17,90,901	6,98,051	4·24	7,20,000	1,37,682	—1,59,631	116	61·02

22. (*j*) West of India Portuguese railway (3′ 3⅜″ gauge)—

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Details of construction—

The line runs from the Portuguese frontier to Mormugao, and is 51·10 miles long. Its construction was sanctioned in 1881 and it was opened through in 1888.

Permanent-way.—The permanent-way throughout consists of 62-lb. flat-footed steel rails on creosoted pine, sál, teak and jamba sleepers.

Ballast.—The line is ballasted throughout with laterite and blue stone.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 720 feet radius.

Gradients.—The ruling gradient is 1 in 100 with a 1 in 40 on the Ghat section.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 108.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads } (a) \text{ to } (l)}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.***

22. (*f*) West of India Portuguese railway (3′ 3¾″ gauge)—*concld.*

Terms of contracts—

The West of India Portuguese railway is worked under the following contracts:—

Contracts of—18th April 1881, modified by the contract of 19th December 1892 (between the Portuguese Government and the West of India Portuguese Railway Company) for the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

21st August 1902, between the Southern Mahratta Railway Company and the West of India Portuguese Railway Company for the maintenance and working of the railway from Mormugao to the Portuguese Frontier, and the harbour at the Port of Mormugao.

The general conditions of the contracts are as follows:—

Government (Portuguese) aid.—5 per cent. per annum is guaranteed to the West of India Portuguese Railway Company on £800,000 and 6 per cent. on £550,000.

Currency of contracts.—The contract of 1881 is current for a period of 99 years from date of opening, when the line and all its appurtenances become the property of the Portuguese Government by payment to the Company of the value of rolling-stock, moveable machinery, stores, etc. The Portuguese Government may, however, determine the contract, at any time, on six months' previous notice, by payment in sterling of the actual outlay of the Company on the railway, telegraph and other works, with 10 per cent. added thereto, together with the then value of rolling-stock, machinery, station appliances and stores. The contract of 1902, between the Southern Mahratta and the West of India Portuguese Railway Companies, which took effect from the 1st July 1902, is to continue in force for five years, subject to amendment or determination after two years on six months' notice by either party.

Power of Company to surrender contract.—By the contract of 1881 as modified by that of 1892 the West of India Portuguese Railway Company may at any time surrender the contract by giving six months' notice if the Portuguese Government fail to pay in full the interest guaranteed on its capital. On surrender of the contract the Portuguese Government are to pay to the Company in sterling an amount equal to the total capital expended on the railway, telegraph, etc., and in addition 10 per cent. of such expenditure; and also purchase the rolling-stock, machinery, etc., at a valuation.

Terms of working by Southern Mahratta Railway Company.—The West of India Portuguese and the Southern Mahratta railways are worked as one concern, and the expenses of the system, (exclusive of expenditure on 'New Minor Works' and of interest payable by the Southern Mahratta railway on the capital cost of telegraph lines), are divided in proportion to their gross earnings, the net earnings to be applied—in payment of a contribution sanctioned by the Portuguese Government towards a reserve fund; in payment of the guaranteed dividends on the capital of the Company; and in payment of the residue to the Portuguese Government and the Company in equal proportions.

The contract of 1902 provides that a separate account be kept of the revenue transactions at the Port of Mormugao, and the amount to be charged for working to be the actual expenses of working and maintenance, *plus* 10 per cent. thereon for supervision by the Southern Mahratta railway, subject to the provision that the relation of the aggregate expenses of working—including supervision—to the total receipts shall not exceed, without the sanction of the West of India Portuguese Railway Company, the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899; should any such excess occur it is to be annulled or reduced as much as possible by a corresponding diminution in the charge for supervision.

Rates and fares.—Subject to the maxima prescribed in the contract between the Portuguese Government and the West of India Portuguese railway and to the maxima and minima prescribed in the contracts between the Secretary of State and the Southern Mahratta railway, the rates both for through and local working shall be fixed from time to time by the Southern Mahratta railway and shall be applicable to the whole system.

The shipping and port charges to conform with those in force under the Bombay Port Trust, and not to exceed those charges without the mutual consent of the British and Portuguese Governments.

Statistics of working—

Calendar year.	Table I. Capital outlay (including outlay on Harbour works) to end of each year.	Gross earnings.	Net earnings.	Per cent on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1890	1,63,14,170	4,75,487	67,001	0·41	136	74·24
1891	1,63,22,189	5,44,014	1,21,583	0·74	157	86·01
1892	1,63,00,901	5,74,681	11,107	0·07	109	106·01
1893	1,62,74,816	5,86,705	1,65,069	1·01	168	78·13
1894	1,63,12,813	5,48,673	1,19,232	0·73	157	86·47
1895	1,63,31,966	5,83,077	1,12,136	0·69	166	90·75
1896	1,63,80,444	2,97,176	—78,893	...	90	137·34
1897	1,63,40,168	1,79,722	—1,60,785	...	55	189·46
1898	1,62,97,448	2,20,870	—1,10,145	...	65	173·60
1899	1,62,96,432	5,72,475	1,64,665	1·01	157	83·15
1900	1,63,29,262	3,33,596	—66,845	...	96	120·04
1901	1,63,42,023	2,68,120	—48,589	...	205	113·20
1902	1,63,08,793	3,54,657	51,387	0·37	133	85·51
1903	1,63,08,793	3,96,235	1,51,112	1·10	149	61·86
1904	1,63,08,793	4,89,786	1,83,414	1·33	184	62·55
1905	1,63,90,269*	4,44,519	1,77,953	1·09	167	59·97

* Approximate.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 22}}{\text{Sub-heads (a) to (l)}}$. **SOUTHERN MAHRATTA RAILWAY SYSTEM**—*concld.*

22. (*k*) **Bezwada-Masulipatam** (3′ 3⅜″ gauge)—

This railway will be 49·50 miles long. It was sanctioned in 1905 and is under construction.

22. (*l*) **Sangli** (3′ 3⅜″ gauge)—

This railway (Miraj Junction to Sangli town) will be 4·00 miles long. Its construction from funds supplied by the Sangli Durbar was sanctioned in 1905.

Number $\frac{\text{Main head 23}}{\text{Sub-head (a)}}$. **UDAIPUR-CHITOR RAILWAY** (3′ 3⅜″ gauge)—

Running powers—

Home line over Foreign line :— Miles.

Rajputana-Malwa railway, Berach to Chitor . . . . . 1·42

The line is owned by the Udaipur State. It was worked by the Bombay, Baroda and Central India railway as a temporary measure up to the 31st December 1897, since which date it has been worked by the Udaipur State.

Details of construction—

This line is 67·30 miles long. Its construction was sanctioned in 1894 and it was opened through in 1899.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on deodar sleepers.

Ballast.—The ballast consists of broken stone.

Fencing.—The line is fenced round stations only.

Curves.—On the Berach-Debari section the sharpest curve is of 1,146 feet radius; and on the extension from Debari to the Ahr river near Udaipur, at the 61st mile, the sharpest curve has a radius of 820 feet.

Gradients.—The ruling gradient is 1 in 120, except on the section Debari to Udaipur where it is 1 in 100.

Terms of contract—

The line is owned and worked by the Udaipur State.

Statistics of working—

Table I.					Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1893	7,000	...	...	...	...	...
1894	2,70,472	...	...	...	...	...
1895	13,39,850	54,702	19,778	1·40	42	65·67
1896	15,63,721	1,35,219	53,750	3·44	43	60·25
1897	15,99,040	1,23,175	42,881	2·68	39	65·19
1898	17,89,252	1,43,822	61,364	3·43	46	57·33
1899	19,89,912	2,10,540	1,04,229	5·27	62	50·21
1900	19,80,010	3,17,928	1,85,703	9·38	91	41·59
1901	20,61,858	2,22,175	94,112	4·56	63	57·65
1902	20,65,630	2,17,388	97,131	4·70	62	55·32
1903	20,66,171	1,77,817	66,446	3·21	51	62·63
1904	20,66,093	1,51,293	53,175	2·57	43	64·86
1905	20,67,464	2,07,927	1,03,552	5·00	119	50·19

Number $\frac{\text{Main head 24}}{\text{Sub-head (a)}}$. **BARASET-BASIRHAT LIGHT RAILWAY** (2′ 6″ gauge)—

Details of construction—

The line is 26·06 miles long. Its construction was sanctioned in 1903 and it was opened in 1905.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on pyinkado, sâl and Australian jarrah wood sleepers.

Ballast.—The line is ballasted with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 400 feet.

Gradients.—The ruling gradient is 1 in 250.

Terms of contract—

The line is worked on the terms contained in the Bengal Government Notification No. 86 R., dated the 15th May 1903, under the following agreement:—

Agreement—of 14th December 1897 (between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company).

The general conditions are as follows:—

Aid by District Board.—The District Board guarantees such an annual subsidy as will make the net profits equivalent to Rs. 1,500 per annum per mile of line declared open, subject to a maximum of Rs. 38,000, and allows the free use of the District road not exceeding 8 feet on one side. (The Company to acquire at its own expense land necessary for stations and diversions.)

Currency of agreement.—Upon the expiration of twenty-one years from the date of the order authorising the construction, by giving six months' notice, or at intervals of seven years thereafter, the District Board can exercise the right of purchase on payment of twenty times the average yearly net earnings of the four years preceding, together with a bonus of twenty per cent. thereon.

APPENDIX 38—*contd.*

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Number $\frac{\text{Main head 24}}{\text{Sub-head (a)}}$. BARASET-BASIRHAT LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Terms of contract—*concld.*

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital *plus* not more than 4 per cent. on debenture capital are equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company may vary its rates.

Statistics of working—

Calendar year.	Table I.							Table II.	
	Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Subsidy from District Board.	Total income.	Percentage of total income on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1905 . . .	9,06,310	1,11,203	55,675	6·07	—5,394	50,281	5·55	90	49·93

Number $\frac{\text{Main head 25}}{\text{Sub-head (a)}}$. BARSI LIGHT RAILWAY (2′ 6″ gauge)—

Details of construction—

The mileage of the open line is 27·93 miles. Its construction was sanctioned in 1895 and it was opened in 1897. There are, in addition, 51·03 miles under construction.

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails on steel sleepers.

Ballast.—The line is ballasted with stone and moorum.

Fencing.—The line is unfenced, except for a short distance on either side of level crossings and at bridges. The Barsi Road Junction and Barsi Town stations are also fenced.

Curves.—The sharpest curve has a radius of 450 feet.

Gradients.—The ruling gradient is 1 in 100. There are, however, two steeper gradients; one of 1 in 89 and the other of 1 in 90.

Terms of contracts—

The Barsi Light railway is worked under the following contracts:—

Contracts of—1st August 1895 (between the Secretary of State and the Barsi Light Railway Company) for construction, maintenance and working the line from Barsi Road Junction to Barsi town.

26th August 1902 (between the Secretary of State and the Barsi Light Railway Company) for construction and working of the extensions.

4th December 1905, supplemental to that of 26th August 1902.

And Despatch from Secretary of State, No. 51 Railway, dated the 8th July 1904, regarding the grant of extension of the term at the end of which the option of purchase may be exercised.

The general conditions are as follows:—

Government aid.—The Company is allowed the use of part of the road between Barsi Town and Barsi Road Junction stations. Land is provided free for the extensions.

Currency of contracts.—Government may determine the contracts on the 1st January 1944, or at the expiration of any subsequent period of 10 years, by giving 12 months' notice. If the contract is so determined, Government are to pay the Company in England in sterling an amount equal to the total paid-up capital, so far as such capital was expended with the authority of the Secretary of State.

Power of Company to surrender contracts.—Nil.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Calendar year.	Table I.				Table II.	
	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1895	2,357	...	...	...	...	...
1896	10,06,657	...	...	...	...	...
1897	13,43,891	1,07,778	21,560	1·60	115	80·00
1898	13,42,592	1,30,321	24,559	1·83	116	81·15
1899	13,56,809	1,56,118	64,475	4·75	139	58·63
1900	13,56,501	1,24,440	42,440	3·13	111	65·90
1901	12,99,589	1,68,238	79,583	6·13	150	52·69
1902	13,18,242	1,50,275	52,879	4·02	134	64·81
1903	12,59,175	1,30,694	53,423	4·24	116	59·12
1904	13,18,293	1,66,934	64,952	4·93	149	61·09
1905	28,13,907	2,19,478	1,39,618	4·96	195	36·39

APPENDIX 38—*contd.*

History of railways constructed and in progress.

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Number $\frac{\text{Main head 26}}{\text{Sub-head (a)}}$. **BUKHTIARPORE-BEHAR LIGHT RAILWAY** (2' 6" gauge)—

The line, which has been laid as far as possible on the District road, is 18·50 miles long. Its construction was sanctioned in 1901 and it was opened in 1903.

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on pyinkado sleepers.

Ballast.—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 260 feet.

Gradients.—The grades are easy, except at bridge approaches and up through the village of Chero where the grade is 1 in 100.

Terms of contract—

The railway has been constructed and is worked on the terms contained in Bengal Government Notification No. 100 R., dated the 25th June 1901, under the following agreement:—

Agreement of—21st August 1899 (between the District Board of Patna and the Bukhtiarpore-Behar Light Railway Company).

The general conditions are as follows:—

Government aid.—In addition to land, which has been provided free of charge except for station sites and diversions from the district road, the District Board supplements the net earnings, subject to a maximum limit of Rs. 32,000 per annum, to allow of the Company paying a dividend of 4 per cent. per annum on the Company's share capital of Rs. 8,00,000.

Currency of agreement.—In the event of the District Board exercising the right of purchase under section 41 of the Bengal Act, III of 1883, *viz.*, upon the expiration of twenty-one years from the date of the order of the Local Government, authorising the construction of the line, by giving six months' notice, or at intervals of 7 years thereafter, the value to be calculated at 20 years' purchase of the average net profits to the Company during the four years preceding the transaction, together with a bonus of 20 per cent. thereon.

Terms of working.—Any surplus profits in excess of 4 per cent. on share capital, *plus* not more than 4 per cent. on debenture capital, are equally divided between the District Board and the Company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1903	7,47,338	35,200	15,120	2·16	74	57·77
1904	8,10,059	1,13,530	65,963	8·14	181	41·90
1905	8,11,338	68,661	35,440	4·37	92	60·03

Number $\frac{\text{Main head 27}}{\text{Sub-head (a)}}$. **CUTCH STATE RAILWAY** (2' 6" gauge)—

Details of construction—

The mileage of the open line (Tuna to Anjar) is 11·86 miles. Its construction was sanctioned in 1903 and it was opened in 1905.

There are, in addition, 25·38 miles (Anjar to Bhuj) under construction.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on half-round jungle teak sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 359 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Terms of contract—

The line is owned and worked by the Cutch State.

Statistics of working—

	Table I.				Table II.	
Calendar year.	Capital outlay to end of the year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1905	4,25,731	22,367	15,864	3·72	59	29·07

APPENDIX 38—*contd.*

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Number $\frac{\text{Main head 28}}{\text{Sub-head (a)}}$. **DHOLPUR-BARI RAILWAY** (2′ 6″ gauge)—

Details of construction—

This line, from Dholpur on the Indian Midland railway to Bari, was sanctioned in 1905 for construction by and at the cost of the Dholpur State. It will be 19·25 miles long.

Number $\frac{\text{Main head 29}}{\text{Sub-head (a)}}$. **DWARA-THERRIA LIGHT RAILWAY** (2′ 6″ gauge)—

Details of construction—

The line is 19·50 miles long. Its construction was sanctioned in 1902.

The work of construction on the Dwara-Maolong section, which was started by Mr. G. L. Garth, the promoter, has been suspended on account of his death in June 1904. It will be proceeded with shortly. The work on the Maolong Therria Ghat section has not yet been authorized.

Terms of contract—

The Dwara-Therria Light railway on completion is to be worked under—

Terms.—Contained in the Notification issued by the Chief Commissioner of Assam under letter No. 44, dated the 14th August 1902.

The general conditions are as follows:—

Government aid.—Guarantee of interest at 4 per cent. per annum for 10 years on a debenture loan of 4 lakhs of rupees, required to complete the Dwara-Maolong section. Land to be provided free of cost.

Currency of contract.—The Secretary of State may, after the Dwara-Maolong section has been opened for twenty-one years and thereafter at intervals of ten years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving two years' previous notice, on paying twenty-five times the average yearly net earnings of the last three years with a minimum of 100 per cent. of the cost price of the light railway.

Rates and fares.—Certain maxima have been fixed. Full control over charges of all kinds for the use of the railway is reserved by the Local Government.

Number $\frac{\text{Main head 30}}{\text{Sub-head (a)}}$. **KALKA-SIMLA RAILWAY** (2′ 6″ gauge)—

The railway was constructed and is being worked by the Delhi-Umballa-Kalka Railway Company.

Details of construction—

The line is 58·44 miles long. Its construction was sanctioned in 1898 and it was opened in 1903.

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on wooden sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced only along the Kalka camping ground and through the skirts of the town of Kalka.

Curves.—Most of the curves are compound, the limiting radius being 120 feet.

Gradients.—The ruling gradient is 1 in 33.

Terms of contracts—

The railway is worked under the following contracts:—

Contracts of—29th June 1898.—(Between the Secretary of State and the Delhi-Umballa-Kalka Railway Company) for construction and working.

15th November 1901.—Contract supplemental to that of 1898 (embodying terms for change of gauge).

20th January 1903.—Contract supplemental to that of 1898 (embodying terms for the advance of fund for the completion of the line).

The conditions of the contracts are as follows:—

Government aid.—Land provided free.

Terms of contracts.—The line was constructed without a guarantee at the cost of the Delhi-Umballa-Kalka Railway Company, for which purpose the Company is authorised to raise further share capital, in addition to the capital already issued for the existing undertaking, to such an amount as may be mutually agreed upon. The amount agreed upon so far is £600,000. As the actual cost has, however, exceeded this amount Government have arranged, owing to sufficient funds not being forthcoming in England, to lend the Company the requisite moneys at 4 per cent. interest.

Currency of contract.—Government may determine the contract, on giving twelve months' notice, either on the expiration of twenty-five years from the date on which the railway has been opened for traffic throughout or on the 31st December 1928 or on the expiration of any subsequent period of ten years. Government may also determine the contract, on giving notice, if the Company fails to comply with certain obligations of the contracts. In the former case Government will pay a sum equal to twenty-five times the amount of the average yearly net earnings during the five years immediately preceding the time of termination, but not exceeding by more than 50 per cent. or not being less than the total capital in sterling expended. In the latter case Government will pay the fair value of the railway and works.

Power of Company to surrender contract.—Nil.

Terms of working.—From the gross earnings will be deducted all charges properly debitable to revenue as working expenses (including any single item of capital expenditure not exceeding Rs. 1,000 classed as a "Minor Work," subject to a maximum charge on such account of Rs. 15 per mile of line open in each half-year), and the balance, after payment of interest on moneys loaned from Government, will represent net earnings for shareholders.

Rates and fares.—Certain maxima and minima have been fixed, and, subject to certain special conditions regarding charges for tunnels, the Company may vary such rates within the maxima and minima.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 30}{\text{Sub-head } (a)}$. **KALKA-SIMLA RAILWAY** (2′ 6″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1899	5,53,228	...	...	...	...	...
1900	13,18,465	...	...	...	...	...
1901	34,86,926	...	...	...	...	...
1902	92,81,656	...	...	...	...	...
1903	1,41,32,884	32,052	7,023	0·04	7	78·09
1904	1,68,25,513	5,90,403	2,06,240	1·24	191	64·75
1905	1,76,11,644	7,52,460	4,00,813	2·28	243	46·73

Number $\frac{\text{Main head } 31}{\text{Sub-head } (a)}$. **SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY** (2′ 6″ gauge)—

Details of construction—

The line will be 125 miles long, *viz.*, (1) main line (Shahdara to Saharanpur) 95 miles and (2) branch (Baraut to Meerut) 30 miles.

Its construction and working by Messrs. Martin and Company of Calcutta was authorized by an order contained in the Notification of the Government of the United Provinces of Agra and Oudh, No. $\frac{339}{187}$ R., dated the 18th April 1904, and a company, styled the Shahdara (Delhi)-Saharanpur Light Railway Company, was registered on the 28th November 1905 for the purpose of constructing the line which has been commenced.

Terms of contract—

The line will be worked under the following agreement :—

Agreement of—11th October 1905 (between the Government of the United Provinces of Agra and Oudh and Messrs. Martin and Company).

The general conditions are as follows :—

Government aid.—Free grant of land for a single 5′ 6″ gauge line and for all conveniences and works.

Currency of agreement.—The Secretary of State will have the right to terminate the contract 21 years after the date of opening or 23 years after the date of the Government letter sanctioning the construction of the tramway, whichever is earlier, at 25 years' purchase of the annual profits to the Company for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25 per cent. in excess of that sum. This option, if not exercised at the time mentioned, may be exercised at the end of successive periods of 7 years counting from that date. In the event of its being determined to construct a railway on a different gauge in place of the tramway and if the Government and the Company fail to agree that the alteration shall be made by the Company, then the Government will have the right to acquire the tramway at any time on 12 months' notice at 25 per cent. in excess of the Company's capital expenditure.

Terms of working.—Whenever the net profits of the tramway shall be in excess of 4 per cent. upon the paid up capital of the Company, such surplus profits shall, after setting aside such reasonable sum as the Directors of the Company may deem proper to carry forward, be equally divided between the Government and the Company.

Rates and fares.—Certain maxima have been fixed.

Number $\frac{\text{Main head } 32}{\text{Sub-head } (a)}$. **TARAKESHWAR-MAGRA LIGHT RAILWAY** (2′ 6″ gauge)—

Details of construction—

The line is 33·27 miles long, *viz.* :—from Magra to Tarakeshwar (31·12 miles) and from Magra to Tribeni (2·15 miles). Its construction was sanctioned in 1891 and the two sections were opened in 1895 and 1904, respectively.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder of the main line on pyinkado sleepers. The Tribeni extension is laid on sal sleepers.

Ballast.—Sand and broken brick.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 716·25 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 1,000 ; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches ; from the bridge under the East Indian railway to Magragunj station, the line is on a gradient of 1 in 350. The ruling gradient on the Tribeni extension is 1 in 500.

Terms of contract—

The Tarakeshwar-Magra Light railway is maintained and worked on the terms contained in Bengal Government Notification No. 1, dated the 4th January 1896, under the following agreements :—

Agreement of—16th October 1890 (between the District Board of Hooghly and the Bengal Provincial Railway Company)

12th March 1904 (between the Secretary of State for India and the Company).

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head } 33}{\text{Sub-head } (a)}$. TARAKESHWAR-MAGRA LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Terms of contract—*concld.*

The general conditions are as follows :—

Government aid.—Free grant of land for the Tribeni extension.

Currency of Agreement.—In the event of the District Board wishing to purchase the railway at the end of 21 years under the provisions of section 41 of the Bengal Tramways Act, 1883 (Bengal Code), the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	
1898	9,44,627	74,074	21,002	2·22	46	71·65
1899	9,62,446	66,168	12,192	1·27	41	81·58
1900	9,61,811	76,594	20,961	2·18	47	72·63
1901	9,72,175	83,150	19,890	2·04	51	70·23
1902	9,76,194	84,272	24,842	2·54	52	70·52
1903	10,15,987	85,546	25,850	2·50	53	70·37
1904	10,44,975	89,735	27,564	2·63	52	69·28
1905	10,46,664	86,838	21,679	2·07	50	74·81

Number $\frac{\text{Main head } 33}{\text{Sub-head } (a)}$. TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge)—

On the 3rd May 1898, the Indian Railways Act, IX of 1890, except section 135, was applied to the line.

Details of construction—

The line is 20·10 miles long. Its construction was sanctioned in 1894 and it was opened in 1895.

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on nahor sleepers.

Ballast.—The line is unballasted.

Fencing.—The line is fenced only at stations.

Curves.—In the first mile there are two curves with radii of 500 feet.

Gradients.—The ruling gradient between Tezpore and Rangapara is 1 in 125 and between Rangapara and Balipara 1 in 100.

Terms of contract—

The Tezpore-Balipara Light railway is maintained and worked under—

Terms—contained in the Notification issued by the Chief Commissioner of Assam under letter No. 33, dated the 1st June 1895.

The general conditions are as follows :—

Government aid.—Free use of Government land and a subsidy to the extent of Rs. 5,000, up to the end of March 1909, from the Local Board at Tezpore.

Currency of contract.—The Secretary of State may, after the railway has been opened for fifteen years and thereafter at intervals of seven years, terminate the contract and take over the railway with all its equipments, buildings and property, upon giving 12 months' previous notice and on paying the Company the value of the property as a dividend earning investment together with an additional bonus of 20 per cent. over and above such value.

Terms of working.—The line is worked by the owning company.

Rates and fares.—Certain rates and fares have been fixed.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	4,56,927	85,745	20,157	4·41	5,000	25,157	5·51	82	76·49
1899	4,74,177	95,157	26,156	5·52	5,000	31,156	6·57	91	72·51
1900	4,87,240	95,981	25,797	5·29	5,000	30,797	6·32	92	73·12
1901	4,87,240	83,840	16,898	3·47	5,000	21,898	4·49	80	79·84
1902	4,87,240	85,012	21,651	4·43	5,000	26,651	5·47	81	74·53
1903	4,87,240	94,742	27,739	5·67	5,000	32,739	6·71	91	70·72
1904	4,87,240	88,463	17,291	3·54	5,000	22,291	4·57	85	80·43
1905	4,87,240	1,03,380	27,082	5·55	5,000	32,082	6·58	99	73·80

APPENDIX 38—*contd.*

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Number $\frac{\text{Main head 34}}{\text{Sub-head (a)}}$. **THATON-DUYINZAIK LIGHT RAILWAY** (2′ 6″ gauge)—

Details of construction—

The line is 7·76 miles long. Its construction was sanctioned in 1883 and it was opened in 1885.

Permanent-way.—The permanent-way consists of 20-lb. flat-footed steel rails on Dick Kerr's patent iron and pyinkado sleepers.

Ballast.—The line is ballasted throughout with sand, stone and laterite.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 207 feet.

Gradients.—The ruling gradient is 1 in 80.

Terms of contracts—

The Thaton-Duyinzaik Light railway is worked under the following:—

Contract of—10th January 1884 (between the Secretary of State and the late Mr. G. E. L. Dawson of Rangoon) for construction and working.

Agreement of—6th June 1896 for working the railway and a steam launch service between Moulmein and Duyinzaik.

The general conditions are as follows:—

Government aid.—Land has been provided at a pepper-corn rent, and the proprietors receive Rs. 350 per mensem for the carriage of mails between Moulmein and Thaton, *vid* Duyinzaik, including both steamer and railway journeys.

Currency of contract.—The contract is in force for a period of 99 years. After the railway has been open for 30 years, and thereafter at intervals of 10 years, the Secretary of State can terminate the contract and take over the railway upon giving 12 months' notice, and paying the value of the permanent-way, buildings and rolling-stock, together with a bonus of 25 per cent. on the value. Government may also determine the contract if the railway is not worked for six consecutive calendar months, or if the proprietors fail to carry out the agreement.

Terms of working.—The railway is now worked and maintained by the Irrawaddy Flotilla Company, who bought the concern on the 1st December 1900.

Rates and fares.—Certain maxima have been fixed within which the proprietors are permitted to vary the rates.

Statistics of working—Information not available.

Number $\frac{\text{Main head 3}}{\text{Sub-head (a)}}$. **DARJEELING-HIMALAYAN RAILWAY** (2′ 0″ gauge)—

Details of construction—

The line, which is laid for a great part of its length along the cart road, is 51 miles long. Its construction was sanctioned in 1879 and it was opened through in 1881.

Permanent-way.—The line in the plain section is laid with 41¼-lb. flat-footed steel rails on wooden sleepers. The hill section was laid with 41¼-lb. flat-footed steel rails, which are being renewed with a special section steel rail, 41¼ lb. to a yard.

Ballast.—For 9 miles from Siliguri the line has been ballasted with gravel or broken stone, except near Siliguri where sand has been used. On the hill section, where necessary, broken stone ballast has been and is being put in.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 60 feet.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukhna to Ghum (summit) and thence to Darjeeling there is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23.

Terms of contract—

The railway is worked under the following contract:—

Contract of—8th April 1879 (between the Secretary of State and the late Mr. Franklin Prestage) for construction, maintenance and working.

The general conditions of the contract are as follows:—

Government aid.—Government undertake to pay the Company such sum as will make up its gross receipts to two lakhs of rupees annually. Government land and the use of the existing cart road granted free of cost.

Currency of contract.—If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from Government, receiving any sums due to it for permanent improvements to the road or works connected therewith. After the railway has been opened for 25 years (reckoning from the 4th May 1884) and thereafter at intervals of 10 years, Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend earning investment, with an additional bonus of 20 per cent. over and above such value.

Power of Company to surrender contract.—Nil.

Terms of working.—After the first five years, and subject to subsequent modifications of clause 16, half the net profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to Government of the amount expended on the maintenance of the cart road during the same year or in making good a deficiency in gross receipts. Government are under obligation to uphold and maintain this road at their own expense, subject to their right to be repaid the charges incurred in any year out of one moiety of the surplus profits earned in that year.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 35}}{\text{Sub-head (a)}}$. **DARJEELING-HIMALAYAN RAILWAY** (2′ 0″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. of net earnings on capital outlay.	Subsidy from Local Government.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1880	12,32,894	43,463	34,197	2·77	...	34,197	2·77	82	29·46
1881	18,18,723	2,61,154	1,15,522	6·35	...	1,15,522	6·35	103	55·76
1882	23,56,112	3,66,474	1,21,983	3·72	...	1,21,983	3·72	141	66·72
1883	26,50,799	4,21,944	1,55,725	5·87	...	1,55,725	5·87	162	63·11
1884	27,23,240	4,35,024	1,46,765	5·39	...	1,46,765	5·39	167	66·26
1885	27,27,623	4,31,103	1,63,350	5·99	...	1,63,350	5·99	163	62·11
1886	27,32,136	4,06,476	2,41,559	8·86	...	2,41,559	8·86	188	51·23
1887	27,45,214	4,77,151	2,10,623	7·68	...	2,10,623	7·63	180	55·86
1888	27,71,926	5,14,893	2,83,327	10·22	...	2,83,327	10·22	238	53·92
1889	29,40,423	5,74,294	2,29,117	7·80	...	2,29,117	7·80	217	60·10
1890	29,52,106	5,76,486	2,32,894	7·89	...	2,32,894	7·89	217	59·60
1891	30,59,693	6,13,387	2,58,253	8·44	...	2,58,253	8·44	231	57·61
1892	31,09,079	6,35,778	2,66,647	8·57	...	2,66,647	8·57	240	57·46
1893	31,73,223	6,34,181	2,83,903	8·50	—1,55,418	1,28,485	4·02	239	55·41
1894	31,77,536	6,36,284	2,56,286	8·10	—29,756	2,26,530	7·13	239	59·27
1895	31,99,765	7,39,618	3,59,933	11·25	—61,740	2,98,193	9·32	279	50·92
1896	33,12,782	7,81,594	3,69,607	10·25	—62,087	2,97,580	8·95	294	53·96
1897	33,15,455	7,44,266	3,33,188	10·05	—55,929	2,77,259	8·36	281	55·28
1898	33,65,998	7,54,580	3,41,109	10·13	—59,432	2,81,677	8·37	285	54·79
1899	35,06,469	7,14,985	2,49,770	7·12	—34,933	2,14,837	6·12	270	65·07
1900	34,99,487	8,09,158	3,61,840	10·34	—64,268	2,97,572	8·50	305	55·28
1901	34,78,411	7,87,941	3,13,861	9·02	—49,971	2,63,890	7·58	321	54·66
1902	34,96,507	8,50,289	3,72,005	10·18	—67,704	3,10,301	8·88	363	56·65
1903	36,13,058	9,61,662	4,16,752	11·54	—79,226	3,37,526	8·79	394	53·46
1904	37,38,436	10,45,187	4,75,327	12·71	—97,200	3,78,027	10·11	367	57·70
1905	37,51,562	9,72,644	4,09,514	10·91	—77,631	3,31,893	8·47		

Number $\frac{\text{Main head 36}}{\text{Sub-head (a)}}$. **HOWRAH-AMTA LIGHT RAILWAY** (2′ 0″ gauge)—

Details of construction—

There are 37·19 miles of open line, *viz.*, main line (Telkul Ghat to Amta), 27·19 miles, and branch (Bargachia to Autpur), 10 miles. Of this two miles, from Howrah to Kadamtala, are worked over by the Howrah-Sheakhala railway. In addition to the above there are 12·50 miles under construction. The construction of the main line was sanctioned in 1895 and it was opened in 1898.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients.—The line is practically level throughout.

Terms of contracts—

The Howrah-Amta Light railway is worked on the terms contained in the Bengal Government Notifications No. 111, dated the 26th March 1895, and No. 75-R., dated the 7th April 1902, under the following agreements :—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

3rd May 1897 (between the District Board of Howrah and the Bengal District Road Tramways Company, Howrah-Amta).

16th August 1901 (between the District Board of Howrah and the Howrah-Amta Light Railway Company).

The general conditions are as follows :—

Aid by the District Board.—As subsidy for payment of interest, the District Board has guaranteed a sum sufficient to make the net earnings equivalent to Rs. 1,100 per annum per mile constructed and opened, limited to a maximum annual payment of Rs. 28,000. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, a clear width of 14 feet being left for vehicular traffic.

Currency of agreement.—The District Board has the power of determining the agreements after 21 years. In the event of the District Board exercising, in conjunction with the District Board of Hooghly and the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act 3 of 1893 (Bengal Code), the value to be placed upon the railway is to be calculated by adding to the value of the whole undertaking, with all its equipments, as a dividend earning investment, a bonus of 20 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company in respect of the railway are in excess of 4 per cent. upon the capital for the time being of the Company, surplus profits are divided between the Company and the District Board in equal proportions.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary its rates.

APPENDIX 38—*contd.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 36.}}{\text{Sub-head (a)}}$ HOWRAH-AMTA LIGHT RAILWAY (2′ 0″ gauge)—*concld.*

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. of net earnings on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	11,24,713	1,89,519	78,916	7·02	—15,062	63,848	5·68	152	58·36
1899	11,41,307	2,50,763	1,12,794	9·88	—27,835	84,959	7·44	163	55·02
1900	11,88,283	2,56,418	1,23,104	10·36	—30,944	92,960	7·81	172	51·99
1901	11,96,697	2,60,530	1,14,092	9·53	—36,146	87,936	7·35	175	56·21
1902	12,68,532	2,65,497	1,33,120	1·49	—29,703	13,417	8·15	178	49·86
1903	12,88,853	2,77,451	1,37,833	10·69	—31,883	1,05,950	8·22	186	50·32
1904	15,91,321	2,97,062	1,54,998	9·74	—35,416	1,19,582	7·51	170	47·82
1905	16,07,464	3,28,722	1,77,464	11·04	—38,862	1,38,602	8·62	170	46·01

Number $\frac{\text{Main head 37}}{\text{Sub-head (a)}}$ HOWRAH-SHEAKHALA LIGHT RAILWAY (2′ 0″ gauge)—

Details of construction—

The line is 19·75 miles long, *viz.*, main line (Kadamtala to Sheakhala), 17·38 miles, and Chanditala-Janai branch, 2·37 miles. The construction of the main line was sanctioned in 1895 and it was opened in 1897.

Permanent-way.—The permanent-way consists of flat-footed steel rails, 25 lbs. to the yard, laid on cross sleepers of pyinkado.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients.—The line is practically level throughout.

Terms of contracts—

The Howrah-Sheakhala Light railway is worked on the terms contained in the Bengal Government Notification No. 112, dated the 26th March 1895, under the following agreements :—

Agreements of—12th June 1889 (between the District Board of Howrah and the Bengal District Road Tramways Company).

16th July 1889 (between the District Board of Hooghly and the Bengal District Road Tramways Company).

The general conditions are as follows :—

Aid by the District Board.—The District Board of Hooghly have guaranteed to make up the net earnings to Rs. 950 per mile constructed and opened per annum. The free use of the district road, not exceeding 6 feet and on one side only, has been granted to the Company for the purpose of laying the line, provided that there shall nowhere be a less width of metalled road clear of the inner rail of the line than 16 feet.

Currency of agreement.—The agreement is current for a period of 21 years. In the event of the District Boards exercising, in conjunction with the Municipality of Howrah, the right of purchase conferred upon them by section 41 of Act III of 1883 (Bengal Code), the price to be placed upon the tramway is to be calculated by adding to the value of the whole tramway with all its equipment as then constituted, a bonus of 15 per cent. over and above such value.

Terms of working.—Whenever the net earnings of the Company are in excess of 4 per cent. upon the capital of the Company actually paid up and expended for the time being, surplus profits are divided between the Company and the District Board of Hooghly in the proportion of two-thirds to the Company and one-third to the District Board.

Rates and fares.—Certain maxima have been fixed within which the Company is permitted to vary rates.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. of net earnings on capital outlay.	Subsidy from District Board.	Total income.	Per cent. of total income on capital outlay.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1898	6,02,398	76,166	16,768	2·75	4,267	21,035	3·45	70	72·12
1899	6,09,494	73,396	21,453	3·52	—250	21,203	3·48	65	70·77
1900	6,09,446	76,019	26,824	4·40	—999	25,825	4·24	74	64·71
1901	6,09,446	75,579	23,165	3·80	1,108	24,273	3·98	77	70·52
1902	6,09,565	82,019	31,789	5·20	—550	31,189	5·12	80	61·33
1903	6,14,715	87,049	34,950	5·68	—668	34,282	5·57	85	59·85
1904	6,14,715	86,261	39,055	6·35	—2,747	36,308	5·91	84	54·72
1905	6,13,608	88,266	38,128	6·21	—2,419	35,709	5·82	86	56·80

APPENDIX 38—*concld.*

History of railways constructed and in progress.

[For Index see page 106.]

Number $\frac{\text{Main head 38}}{\text{Sub-head (a)}}$. **JORHAT (STATE) RAILWAY** (2′ 0″ gauge)—

The line was constructed out of Provincial revenues by the Government of Assam for the convenience of the numerous tea gardens in the neighbourhood of Jorhat.

Details of construction—

The line is 30·25 miles long, *viz.*, main line (Borghop to Titabar), 23·25 miles, and Mariani branch, 7 miles. Construction of the line was sanctioned in 1883 and the main line section was opened in 1887 and the branch in 1885.

Permanent-way.—Excepting 2·51 miles of the line between Jorhat and Gosaigaon, which is laid with steel rails 30-lb. to the yard, the whole line, including the section from Gosaigaon to Borghop, is laid with steel rails, 18-lb. to the yard.

Ballast.—The line is unballasted.

Fencing.—Of the railway land acquired for stations and buildings that at Jorhat only is demarcated by fencing.

Curves.—The sharpest curve is of 480 feet radius.

Gradients.—Four miles on a gradient of 1 in 800.

Terms of contracts—

The line is owned and worked by the State.

Statistics of working—

Calendar year.	Table I. Capital outlay to end of each year.	Gross earnings.	Net earnings.	Per cent. on capital outlay.	Interest.	Gain or loss to the State.	Table II. Earnings per mile per week.	Proportion of expenses to earnings.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1884	4,38,333	1,161	—483	...	17,583	—18,016	40	141·60
1885	5,14,641	31,828	—7,455	...	19,395	—26,850	25	133·14
1886	5,84,608	38,271	—13,887	...	22,026	—35,913	28	136·28
1887	6,79,372	49,199	—13,772	...	26,668	—40,350	32	127·99
1888	7,10,376	55,477	75	...	27,807	—27,732	38	90·86
1889	7,33,649	59,665	—3,543	...	29,057	—32,600	42	105·94
1890	7,42,351	61,967	6,162	0·85	29,448	—23,286	44	90·06
1891	7,51,421	64,588	1,483	0·20	30,026	—28,543	47	97·70
1892	7,54,791	66,079	11,789	1·56	30,107	—18,318	48	82·16
1893	7,99,680	69,810	14,436	1·81	32,013	—17,577	52	79·32
1894	8,18,184	71,933	11,201	1·37	32,587	—21,386	52	84·43
1895	8,28,409	84,696	18,720	2·26	32,919	—14,199	61	77·81
1896	8,65,300	89,996	13,745	1·59	33,592	—19,847	65	84·73
1897	9,02,416	96,186	14,124	1·57	36,102	—21,978	69	85·83
1898	9,09,445	95,958	20,135	2·21	36,179	—16,044	70	79·02
1899	9,31,626	96,488	—5,946	...	37,228	—43,174	72	106·16
1900	9,08,643	86,695	—15,664	...	36,341	—52,005	63	118·05
1901	9,01,038	83,184	—4,169	...	36,248	—40,417	56	105·01
1902	8,95,693	86,641	—3,655	...	36,237	—39,892	57	104·92
1903	9,03,343	90,710	13,594	1·51	36,408	—22,814	59	85·01
1904	9,03,781	74,293	—3,840	...	36,260	—40,100	47	105·17
1905	9,08,441	78,600	2,458	0·27	36,480	—34,022	50	96·87

APPENDIX 39.

Statement showing the total working expenses on the principal railways in India during the year 1905 divided in proportion between coaching and goods, under gross receipts, total train-mileage and gross ton-mileage.

5′ 6″ GAUGE LINES.

Number.	RAILWAY. 1905.	Total working expenses.	GROSS RECEIPTS. Appendix 18.		TRAIN-MILES. Appendix 18.		TON-MILES INCLUDING DEAD WEIGHT. Appendix 18.	
			Item No. 21.	*Item No. 89.*	*Item No. 22.*	*Item No. 90.*	*Item No. 73.*	*Item No. 109.*
			Coaching.	Goods.	Coaching.	Goods.	Coaching.	Goods.
		(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands.)	(In thousands.)	(In millions.)	(In millions.)
1 (a)	Bengal-Nagpur	106·24	74·27	154·57	2,143·96	3,410·11	534·96	1,475·92
	Proportion	...	1	2·08	1	1·59	1	2·76
2 (a) to (f)	Bombay, Baroda and Central India ...	97·49	74·63	139·61	2,212·45	1,251·32	554·02	782·31
	Proportion	...	1	1·87	1·77	1	1	1·41
3 (a)	Eastern Bengal State	64·44	42·01	69·53	1,508·34	1,079·96	367·47	504·28
	Proportion	...	1	1·66	1·39	1	1	1·37
4 (a) to (d).	East Indian	282·15	239·28	526·94	6,989·86	9,056·78	1,077·08	5,637·35
	Proportion	...	1	2·20	1	1·32	1	2·74
5 (a) to (f).	Great Indian Peninsula	304·00	176·27	445·98	7,122·99	8,015·64	1,733·66	3,356·83
	Proportion	...	1	2·53	1	1·13	1	1·94
6(a) to (e).	Madras	122·39	74·48	128·43	2,133·19	3,041·19	530·78	1,218·63
	Proportion	...	1	1·72	1	1·43	1	2·30
8 (a) & (b).	Nizam's Guaranteed State ...	15·72	10·85	33·28	285·64	687·80	87·32	273·50
	Proportion	...	1	3·07	1	2·41	1	3·13
9 (a) to (f).	North Western State	320·42	199·98	429·80	7,925·04	9,466·59	1,789·38	4,253·26
	Proportion	...	1	2·15	1	1·19	1	2·38
10 (a) & (b).	Oudh and Rohilkhand State ...	92·21	72·02	73·08	2,999·88	1,975·98	722·72	808·02
	Proportion	...	1	1·01	1·52	1	1	1·12

APPENDIX 39—*concld.*

Statement showing the total working expenses on the principal railways in India during the year 1905, divided in proportion between coaching and goods, under gross receipts, total train-mileage and gross ton-mileage.

3′ 3⅜″ GAUGE LINES.

Number.	RAILWAY. 1905.	Total working expenses.	GROSS RECEIPTS. Appendix 18. Item No. 21. Coaching.	GROSS RECEIPTS. Appendix 18. Item No. 89. Goods.	TRAIN-MILES. Appendix 18. Item No. 22. Coaching.	TRAIN-MILES. Appendix 18. Item No. 90. Goods.	TON-MILES INCLUDING DEAD WEIGHT. Appendix 18. Item No. 73. Coaching.	TON-MILES INCLUDING DEAD WEIGHT. Appendix 18. Item No. 109. Goods.
		(In lakhs.)	(In lakhs.)	(In lakhs.)	(In thousands)	(In thousands)	(In millions.)	(In millions.)
2 (*g*) to (*m*).	Rajputana-Malwa	118·80	91·35	184·88	3,459·59	4,050·77	581·14	1,178·85
	Proportion	...	1	2·02	1	1·17	1	2·03
3 (*b*) and (*c*).	Eastern Bengal State	44·07	35·23	44·20	1,253·67	1,071·23	179·51	294·70
	Proportion	...	1	1·25	1·17	1	1	1·64
8 (*c*)	Hyderabad-Godavari Valley ...	16·35	9·59	19·19	335·01	557·23	73·71	111·36
	Proportion	...	1	2·00	1	1·45	1	1·51
11 (*a*)	Assam-Bengal	32·33	14·88	17·04	552·33	885·20	100·32	162·67
	Proportion	...	1	1·15	1	1·60	1	1·62
12 (*a*) & (*b*).	Bengal and North-Western ...	53·31	58·68	63·64	2,448·87	2,116·45	443·25	536·72
	Proportion	...	1	1·08	1·16	1	1	1·21
14 (*a*) to (*d*).	Bhavnagar-Gondal-Junagad-Porbandar	10·99	13·35	8·33	341·35	220·55	53·79	46·46
	Proportion	...	1·60	1	1·55	1	1·16	1
15 (*a*)	Burma	95·95	69·57	85·37	1,951·82	2,833·36	379·46	637·25
	Proportion	...	1	1·23	1	1·45	1	1·68
18 (*a*) to (*c*).	Jodhpur-Bikaner	14·91	14·04	20·29	516·92	556·75	96·18	127·97
	Proportion	...	1	1·44	1	1·08	1	1·33
20 (*a*) & (*b*).	Rohilkund and Kumaon	10·13	8·60	10·42	297·67	349·75	47·65	70·30
	Proportion	...	1	1·21	1	1·17	1	1·48
21 (*a*) to (*f*).	South Indian	69·77	77·23	61·63	2,423·50	2,196·19	397·86	452·36
	Proportion	...	1·25	1	1·10	1	1	1·14
22 (*a*) to (*j*).	Southern Mahratta	69·36	43·54	68·75	1,696·09	2,608·05	271·68	522·94
	Proportion	...	1	1·58	1	1·54	1	1·92

APPENDIX 40.

Memorandum by the Railway Board on the results of Indian railway working, 1905-1906, and proposals for 1906-1907, as published in the Financial Statement.

The results of working of Indian railways for the year 1905-1906 show larger gross receipts and larger revenue expenditure than in any previous year.

The estimated net surplus Revenue, after paying all charges, including interest, is three crores three lakhs and eighty-three thousands (£2,025,600).

CAPITAL EXPENDITURE.

The Capital expenditure during the year 1905-1906 will amount to twelve crores fifty lakhs (£8,333,000), being about two crores in excess of the expenditure for the year 1904-1905.

For the year 1906-1907 these figures have been largely increased. The estimate provides for spending a sum of 15 crores (£10,000,000), an increase of 20 per cent. on the provision of last year.

Under the head of lines already open, including the provision of additional rolling stock, the amount expended in 1905-1906 will be 726 lakhs (£4,840,000), showing an advance of about 224 lakhs over the expenditure under the same head for the previous year.

Under the same heads in 1906-1907 provision is made for 891 lakhs (£5,940,000), an increase of about 23 per cent.

A comparison, showing capital expenditure for 1906-1907 and the previous five years, is contained in the following statement :—

	Lines already open including additional rolling stock.	Lines under construction.		Total.	Equivalent in sterling.
		Started in previous years.	Started in current year.		
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	£
1901-1902 (actual expenditure) ...	3,52·58	5,09·06	25·64	8,87·28	5,915,199
1902-1903 („ „) ...	4,81·74	4,52·50	71·52	10,05·76	6,705,064
1903-1904 („ „) ...	5,58·77	3,13·68	84·62	9,57·07	6,380,468
1904-1905 („ „) ...	5,02·76	4,86·91	88·62	10,78·29	7,188,600
1905-1906 (latest grants) ...	7,26·63	4,81·04	42·33	12,50·00	8,333,334
1906-1907 (proposed grants) ...	8,91·09	5,38·91	70·00	15,00·00	10,000,000

The information showing in detail how the expenditure in 1905-1906 and 1906-1907 will be distributed is contained in statement A attached to this memorandum.

Under the order of the Secretary of State a programme has been submitted to him for expenditure on railways during the next three years.

This " triennial programme," as it is called, has been definitely agreed to by the Secretary of State for the year 1906-1907 and provisionally approved for the remaining two years.

The year 1906-1907 is the first year this arrangement will come into operation. The object aimed at is to enable a Railway Programme, extending over a reasonable period, being made out under as fixed conditions for new railways and additions to existing ones as Indian finance will permit, and also to secure a definite continuity of railway policy, and the Railway Board have every hope that the funds required to meet the expenditure of 15 crores per annum for the next three years will be duly provided.

APPENDIX 40—*contd.*

The mileage of lines of all gauges open to traffic on 1st April 1905 was 27,728, and under construction 2,344; on 1st April 1906 there will be 28,684 open and 1,959 under construction.

At the end of the coming year there will be 1,509 miles under construction among which will be twelve new projects.

RAILWAY REVENUE ACCOUNT.

The railways of India, taken as a whole, have for a succession of years shown a balance to the credit of general revenues, after allowing for working expenses, interest on capital expended, charges for annuities in redemption of capital and miscellaneous railway expenditure. The following table shows the approximate figures for 1905-1906 compared with the actual results for the previous five years:—

(*Figures in rupees omitting 000*).

	Gross receipts.	Working expenses.	Interest charges, etc.	Surplus of revenue over expenditure.	Equivalent in sterling.
	₹	₹	₹	₹	£
Actuals—					
1900-1901 ...	27,44,04	12,69,86	14,25,41	48,77	325,100
1901-1902 ...	30,33,90	14,23,85	14,83,06	1,26,99	846,600
1902-1903 ...	30,20,08	14,74,08	15,11,66	34,34	228,900
1903-1904 ...	32,33,68	15,56,72	15,47,86	1,29,10	860,700
1904-1905 ...	36,03,37	16,94,32	15,93,23	3,15,82	2,105,500
Estimate—					
1905-1906 ...	36,98,72	17,44,54	16,50,35	3,03,83	2,025,600

Compared with the results of the previous year the figures for 1905-1906 show a falling off of Rs. 11,99,000 (£79,900). The receipts are more by Rs. 95,35,000 (£635,700), but the working expenses are higher by Rs. 50,22,000 (£334,800), while interest charges, etc., have increased by Rs. 57,12,000 (£380,800).

GROSS RECEIPTS.

In 1904-1905 traffic conditions were exceptionally favourable on all the larger railway systems. Pilgrim, grain and coal traffic accounted for a large increase on the East Indian railway; the recently completed irrigation works in the Punjab rendered possible the heavy export traffic in wheat *viâ* Karachi, resulting in an extraordinary increase on the North Western railway, while the earnings of the Great Indian Peninsula, Rajputana-Malwa, and Bengal-Nagpur railways were also affected by favourable crops. During the current year, while there has been a considerable falling off in grain and seed traffic on the North Western railway, and the East Indian railway earnings were practically stationary, the earnings from the other three above-mentioned railways show still better results owing to further development of cotton, grain and specially coal traffic. The following are the principal differences resulting in the net increase of Rs. 95,35,000 in gross receipts:—

		Rs.
Increases.		
Bengal-Nagpur		56,65,000
Great Indian Peninsula		32,55,000
Rajputana-Malwa		30,70,000
Other railways (net)		33,93,000
		1,53,83,000
Decrease.		
North Western		58,48,000
Net increase ...		95,35,000

WORKING EXPENSES, INTEREST CHARGES, ETC.

The increase in working expenses during the year 1905-1906 is estimated to amount to Rs. 50,22,000 (£334,800). This increase to a large extent is due to increased traffic on certain lines, of which the Bengal-Nagpur, Great Indian Peninsula and Rajputana-Malwa railways are the most prominent examples.

APPENDIX 40—*contd.*

These three lines will have earned more than one crore of rupees (£666,700) in excess of their earnings during the previous year, and this increase in earnings necessitate increased working expenses.

There are, however, other causes which may increase both working expenses and interest charges in the future. The increase in working expenses should be to a considerable extent temporary; the increase in interest charges, however, will be permanent.

The causes are these—

Railways in India have now to run faster trains, provide better carriages, improve the conditions under which third class passengers are carried, introduce a more elaborate system of signalling, and generally conduct their business under more up-to-date methods than were in use in the past.

Some of these improvements will lead to increased revenue. Some will not, but have to be provided to meet the public demands.

The cost of many of these improvements being in the nature of renewals has to fall to a considerable extent on revenue.

During the period this raising of the standard is being carried out working expenses must rise, though in the end, under some items, more economical working should be secured.

Again it is generally admitted that there is economy in railway working in hauling heavy train loads. To enable heavy train loads to be hauled the permanent-way of railways has to be improved and girders strengthened. Most lines now, when making branches, wish to use their light main line rails in these branches and renew the main line with heavier rails.

This is a sound business arrangement, but carrying out the policy indicated means that revenue has to renew before the rail itself is nearly worn out. The result is increased debits to Revenue for a time, causing increased working expenses. The Board hope that a practical solution may be found to meet this difficulty, so that working expenses may be steadied and not liable to unnecessary fluctuations.

The results of improvement in the standard of permanent-way, carrying with it the capacity to haul heavier loads, will well repay the expenditure by ultimate reduction in cost of haulage.

NEW LINES TO BE CONSTRUCTED.

The new lines, the construction of which is to be commenced during 1906-1907 are :—

No.	Railway.	Gauge.	Probable length. Miles.
	(i) State, by State Agency.		
1	Bombay-Sind connection	5′ 6″	295
	Eastern Bengal—		
2	Lalgola-Gherria	5′ 6″	13
	North-Western—		
3	Jhang-Chiniot-Sangla	5′ 6″	70
4	Lodhran-Khanewal	5′ 6″	55
5	Shorkot Road-Chichoki	5′ 6″	130
6	Thal-Parachinar	5′ 6″	55
7	Kohat-Thal (conversion from the 2′ 6″ gauge, not resulting in increased open mileage)	5′ 6″	62
	(ii) State, by Agency of Companies.		
	Assam-Bengal—		
8	Kalaura-Sylhet	3′ 3⅜″	31
	Burma—		
9	Daga-Naikban	3′ 3⅜″	69
	East Indian—		
10	Katwa-Azimganj-Barharwa	5′ 6″	103
	(iii) From capital of Companies.		
	Bengal-Nagpur—		
11	Vizianagram-Raipur	5′ 6″	310
	(iv) From capital of Local Boards.		
12	Kurnool-Dhone	3′ 3⅜″	32

APPENDIX 40—*contd.*

OPEN LINE REQUIREMENTS.

In dealing with the capital funds available for expenditure on railways, the Railway Board have given due consideration to the demands of open lines for the provision of additional facilities required by a growing trade.

For improving railway working there are demands of high importance for doubling existing lines, additional crossing stations, improved signalling, improvement of railway workshops, more staff quarters and the general provision of facilities of smaller character required to enable railways to deal more expeditiously with their traffic.

The total amount allotted during 1906-1907 to open lines, *viz.*, 891 lakhs (£5,940,000), out of a total for the year of 1,500 lakhs (£10,000,000), has been divided between general open line requirements and additional rolling-stock approximately as follows :—

		Lakhs.
1906-1907	Open line requirements	509
	Rolling stock	382

This shows a considerable increase over 1905-1906, the figures for which were as follows :—

		Lakhs.
1905-1906	Open line requirements	452
	Rolling stock	274

ROLLING STOCK.

The question of what is a sufficiency of rolling stock on a railway is one about which there is considerable difference of opinion. If railways are to be worked commercially, their interests have to be considered. It is sometimes argued that it is in the interest of the railway to be always able to carry *all* traffic offering at *all* times.

To provide for a maximum demand for transport for a short period would necessitate a very large amount of extra rolling-stock being kept to meet this exceptional demand. This rolling-stock would lie idle for considerable periods and be a burden on the capital cost of the line.

In most countries of the world, especially in America where a large export grain, seeds and coal business is done, there is shortness in the supply of rolling-stock at certain times and during unusual briskness of trade.

On this important question, the Railway Board are of the opinion that Indian railways as a whole are at present below what should be the standard of equipment of rolling-stock for present requirements. Since the Board was formed they have taken steps to improve this standard and will continue to do so to meet future developments of trade.

For the year 1906-1907 the sum of three crores eighty-two lakhs has been provided for new rolling-stock, being an excess of one crore eight lakhs over the provision for 1905-1906.

The stock now under indent consists of heavier engines and higher capacity vehicles. This represents a considerable increase in power of transportation beyond that indicated by the actual numbers added.

Some of the restrictions on axle loads in existing stock have also been relaxed, which has permitted existing wagons being more heavily loaded.

THIRD CLASS PASSENGER TRAFFIC.

The question of improving the comfort and convenience of third class passenger traffic is a matter the Railway Board have been devoting considerable attention to during the past year.

APPENDIX 40—*contd.*

More third class rolling-stock is undoubtedly required.

Provision has, as far as practicable, been made for this during the year 1906-1907, the number sanctioned being double that supplied in 1905-1906.

The additional stock to be supplied during the ensuing year will be of a better type than formerly. The carriages will be of a large size, better lighted and be supplied with latrine accommodation. The stock being built for renewals is also of this higher standard.

Steps will be taken during the ensuing year to develop more rapidly the system of communication between passengers and guards and drivers of trains, the system being applied to third class carriages equally with those of the higher classes.

The Board would also note that, in response to their representations, the various railway administrations are paying attention to the general convenience of third class passengers in taking tickets, avoiding crushes on platforms, and overcrowding in carriages, but much more remains to be done. The Board hope that this will induce larger numbers to travel, and thus lead to improved receipts from this valuable class of traffic.

GENERAL.

During 1905 the Railway Board authorized a substantial reduction in the minimum rate for the carriage of coal. Railways, however, are moving cautiously in taking advantage of this reduction, but the Board feel sure the final result must be a large increase in the coal business and a general stimulus to industries situated far from their coal supply.

Attention is invited to statements B and C accompanying this memorandum, which contain information of interest.

APPENDIX 40—*contd.*

STATEMENT A.

Statement of anticipated capital expenditure on railways, open and under construction, for the year 1906-1907.

Branch lines under rebate terms are excluded.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Grants allotted for 1905-1906.	Distribution of grants during 1906-1907.
	A.—OPEN LINES.		
	I. (i)—State, by State Agency.	R	R
	Eastern Bengal—		
1	Main line	(a) 125·65	38·06
2	Canal Junction-Kakurgachi duplicating	0·95	1·90
3	Kakurgachi chord	2·10	
4	Kasipur-Chitpur improvements	1·10	1·30
5	Kaunia-Bonarpara	4·85	3·86
6	Jodhpur-Hyderabad (British section)	0·32	0·30
	Oudh and Rohilkhand—		
7	Main line	31·16	22·00
8	Allahabad-Fyzabad, Ganges Bridge	—1·48	...
	North Western—		
9	Main line	131·29	150·50
10	Peshawar Railway Reserve	—2·89	...
11	Rohri-Samasata doubling	65·50	59·50
12	Warora Colliery	—0·95	—0·30
13	Purchase of Kalka-Simla Ry.	...	45·00
	Total Open Lines, State, by State Agency	357·60	322·22
	I. (ii)—State, by Agency of Companies.		
14	Assam-Bengal	(b) 37·17	15·00
	Bengal and North-Western—		
15	Tirhoot	15·20	20·00
16	Sakri-Jainagar	...	1·00
	Bombay, Baroda and Central India—		
17	Main line	(c) 160·48	10·00
18	Palanpur-Deesa	0·01	0·03
19	Rajputana-Malwa	20·64	30·00
20	Rewari-Phulera	7·44	2·90
	East Indian—		
21	Main line	89·00	122·00
22	Agra Junction-Belinganj	6·00	6·00
	Great Indian Peninsula—		
23	Main line	58·82	78·00
24	Agra-Delhi chord	10·93	1·20
25	Bhopal-Itarsi (British section)	0·60	2·00
26	Lonavla-Poona doubling	...	5·00
	Madras—		
27	Nilgiri	1·90	1·80
28	North-East line (East Coast)	7·00	20·00
	Nizam's Guaranteed State—		
29	Bezwada extension	0·04	0·03
	South Indian—		
30	Main line	17·75	27·50
31	Travancore branch (Native State section)	0·82	2·00
32	„ „ (British section)	0·27	1·00
	Southern Mahratta—		
33	Guntakal-Mysore Frontier	0·08	0·10
	Total Open Lines, State, by Agency of Companies	434·15	345·56

(*a*) Includes Rs. 77·62 advanced to the Bengal Central Railway Company up to 30th June 1905, transferred from "Capital of Indian Railway Companies."

(*b*) Includes Rs. 17·25 for purchase of Noakhali Railway.

(*c*) Includes Rs. 155·48 advanced to and overdrawn by the Company up to 31st December 1905, transferred from "Guaranteed Companies."

APPENDIX 40—*contd.*

Capital expenditure on railways, 1906-1907—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Grants allotted for 1905-1906.	Distribution of grants during 1906-1907.
		R	R
	A.—OPEN LINES—*concld.*		
	II.—From Capital of old Guaranteed Companies.		
34	Bombay, Baroda and Central India	(*a*)—148·73	...
	Madras—		
35	Main line	16·02	32·60
36	Calicut-Azhikal	0·30	0·40
	Total Open Lines, old Guaranteed Companies	—132·41	33·00
	III.—From Capital of Companies other than old Guaranteed Companies.		
37	Assam-Bengal	—0·17	...
38	Bengal Central	(*b*) - 77·54	...
	Bengal-Nagpur—		
39	Main line	6·27	17·00
40	Midnapur-Jherriah	82·19	100·00
41	Satpura (Jubbulpur-Gondia)		
42	Sini-Midnapur-Cuttack-Calcutta		
	Burma—		
43	Main line	24·07	29·00
44	Hlawga-Letpadan doubling	...	6·00
45	Thingangyum-Pegu doubling	...	
	Great Indian Peninsula—		
46	Indian Midland	10·30	22·70
47	Bhopal-Dewanganj doubling	...	4·00
	Rohilkhand and Kumaon—		
48	Lucknow-Bareilly	2·08	3·00
	Southern Mahratta—		
49	Main line	18·51	6·00
50	Mysore section	1·53	2·31
	Total Open Lines, other Companies	67·24	190·01
	IV.—From Capital of Branch Line Companies with firm Guarantee.		
51	Hardwar-Dehra	0·05	0·30
	Total Open Lines, Branch Line Companies	0·05	0·30

(*a*) Includes credit of Rs. 155·48 representing advances to and overdrafts by Company up to 31st December 1905, transferred to "State Railways."

(*b*) Includes credit of Rs. 77·62 representing advances to Company on 30th June 1905 transferred to "State Railways."

APPENDIX 40—*contd.*

Capital expenditure on railways, 1906-1907—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1904-1905.	Grants allotted during 1905-1906.	Distribution of grants during 1906-1907.
		Miles.	₹	₹	₹	₹
	B.—CONSTRUCTION OF LINES.					
	I, (i)—State, by State Agency.					
	Lines in Progress.					
52	Coonoor-Ootacamund	12	24·40	2·35	6·86	9·00
	Eastern Bengal—					
53	Golakganj-Gauhati	151	93·26	34·02	22·13	13·40
54	Forbesganj-Nepal frontier	6·5	2·22	...	0·70	1·40
	Nagda-Muttra—					
55	Main line	344	298·11	7·29	73·19	141·00
56	Baran-Kotah	40	37·59	...	1·00	10·00
	North-Western—					
57	Khushalgarh-Kohat conversion and Indus bridge	83	24·45	1·51	15·63	3·00
58	Quetta-Nushki	83	90·06	69·61	16·45	1·47
59	Sargoda-Shorkot Road (Jech Doab)	103	71·59	44·96	18·84	3·00
60	Shahdara-Sangla	55	28·29	4·19	16·16	5·50
61	Shilman Branch	23	50·43	...	7·75	35·00
	Oudh and Rohilkhand—					
62	Allahabad-Jaunpur	58	33·04	6·10	19·00	4·00
	Ranaghat-Katihar—					
63	Katihar-Godagari	105	104·86	6·35	31·89	47·00
64	Ranaghat-Murshidabad-Lalgola	98	105·53	73·19	14·09	6·00
	New Lines.					
65	Bombay-Sind connection	295	211·00	...	...	3·00
	Eastern-Bengal—					
66	Lalgola-Gherria	13·47	9·19	...	...	6·00
	North-Western—					
67	Jhang-Chiniot-Sangla	70	35·00	...	...	7·00
68	Lodhran-Khanewal	57	45·15	...	...	7·00
69	Shorkot Road-Chichoki	130	81·34	...	...	10·00
70	Thal-Parachinar	60	35·22	...	...	7·00
71	Kohat-Thal conversion	57	30·32	...	...	
	Total	...	...	249·57	243·69	319·77

APPENDIX 40—*contd.*

Capital expenditure on railways, 1906-1907—contd.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Length.	Amount of estimate or approximate cost.	Outlay to end of 1904-1905.	Grants allotted during 1905-1906.	Distribution of grants during 1906-1907.
		Miles.	₹	₹	₹	₹
	B.—CONSTRUCTION OF LINES—*concld.*					
	I. (ii)—State, by Agency of Companies.					
	Lines in Progress.					
	Assam-Bengal—					
72	Akhaura-Bhairab Bazar	19	12·20	...	1·77	4·97
	Bengal and North-Western—					
73	Tirhoot extensions	209	114·80	40·60	37·50	24·00
	Burma—					
74	Henzada-Kyangin	66	54·59	31·07	52·06	51·00
75	Pegu-Moulmein	122	112·88			
	East Indian—					
76	Bhagalpur-Bausi	31	23·31	...	5·00	10·00
77	Gya-Barakar	148	206·81	131·40	60·00	15·00
78	Hooghly-Katwa	65	58·46	...	3·00	10·00
79	Khurja-Hapur	39	26·08	5·09	11·00	7·00
80	Ondal-Sainthia	45	43·55	16·57	23·50	4·00
81	Shikohabad-Farakhabad	66	53·83	32·00	15·00	...
	Great Indian Peninsula—					
82	Harbour Branch	8	45·60	...	9·94	20·00
83	Warora-Bellarpur	38	31·94	8·26	8·40	6·67
	Madras —					
84	Azhikal-Mangalore	77	129·05	77·64	29·85	16·00
	South Indian—					
85	Rameswaram Extension	12	35·19	0·97	3·62	20·50
	New Lines.					
	Assam Bengal—					
86	Kalaura-Sylhet	31	22·06	...	...	6·00
	Burma—					
87	Daga-Naikban	69	50·00	...	...	6·00
	East Indian—					
88	Katwa-Azimganj-Barharwa	103	86·37	...	...	3·00
	Total	...	...	343·60	260·64	204·14
	II.—From Capital of old Guaranteed Companies	...	...	...	...	...
	III.—From Capital of Companies other than old Guaranteed Companies.					
	Lines in progress.					
	Bengal-Nagpur—					
89	Gondia-Chanda	212	89·34	...	4·34	41·00
90	Pench Valley	29	16·53	1·87	5·87	3·00
91	Purulia-Ranchi	72	39·83	...	4·83	20·00
	New Lines.					
	Bengal-Nagpur—					
92	Vizianagram-Raipur	311	250·42	...	...	8·00
	Total	...	...	1·87	15·04	72·00
	IV.—From Capital of Branch Line Companies with firm Guarantee	...	...	...	...	...
	V.—From Capital of Local Boards.					
	Lines in Progress.					
93	Bezwada-Masulipatam	50	24·25	...	4·00	6·00
	New Lines.					
94	Dhone-Kurnool	32	7·11	...	...	7·00
	Total	...	...	...	4·00	13·00

APPENDIX 40—*contd.*

Capital expenditure on railways, 1906-1907—concld.

(Figures in lakhs and decimals of lakhs.)

No.	Railway.	Distribution of grants for 1906-1907.	
		R	R
	ABSTRACT BY OPEN LINES AND CONSTRUCTION.		
	A.—Capital for Open Lines.		
	I. (i) State, by State agency	322·22	
	I. (ii) State, by agency of Companies	345·56	
	II. Old Guaranteed Companies	33·00	
	III. Other Companies	190·01	
	IV. Branch Line Companies	0·30	
	Total Open Lines		891·09
	B.—Capital for Lines in Progress and New Lines.		
	I. (i) State, by State agency	319·77	
	I. (ii) State, by agency of Companies	204·14	
	II. Old Guaranteed Companies	...	
	III. Other Companies	72·00	
	IV. Branch Line Companies	...	
	V. Local Boards	13·00	
	Total Lines in Progress and New Lines		608·91
	GRAND TOTAL		1500·00
	ABSTRACT SHOWING DISTRIBUTION BY FUNDS.		
I.—From Imperial Funds.	(i) State, by State agency — (*a*) Open Lines	322·22	
	(i) State, by State agency — (*b*) Construction	319·77	
	Total (i)		641·99
	(ii) State, by agency of Companies — (*a*) Open Lines	345·56	
	(ii) State, by agency of Companies — (*b*) Construction	204·14	
	Total (ii)		549·70
	Total I		1191·69
II.—From Capital of old Guaranteed Companies	(*a*) Open Lines	33·00	
	(*b*) Construction	...	
	Total II		33·00
III.—From Capital of Companies other than old Guaranteed Companies.	(*a*) Open Lines	190·01	
	(*b*) Construction	72·00	
	Total III		262·01
IV.—From Capital of Branch Line Companies with firm Guarantee.	(*a*) Open Lines	0·30	
	(*b*) Construction	...	
	Total IV		0·30
V.—From Capital of Local Boards	(*a*) Open Lines	...	
	(*b*) Construction	13·00	
	Total V		13·00
Total, I to V	(*a*) Open Lines	891·09	
	(*b*) Construction	608·91	
	GRAND TOTAL	...	1,500·00

APPENDIX 40—*contd.*

STATEMENT B.

Statement showing proposed lines which are under negotiation for construction by private companies.

No.	Name of railway.	Length.	Estimated cost.	
	Bengal—	Miles.	₹	
1	Panchkura to Luff Point with terminal and loading arrangements for ships or steamers at the latter place	80	(*a*)	
	Bombay—			
2	Aden to Nobat Dakim (or Sheikh Othman and D'thala)	(*b*) 40	Not stated.	
3	Dholka-Dhandhuka	40	Do.	
4	Dhandhuka-Ranpur	18	Do.	This is a tramway.
5	Idar Road to Bramhakhed	32	Do.	
	Eastern Bengal and Assam—			
6	Borjan to Suntak	8	2,70,000	This is a tramway.
7	Mymensingh, *vid* Netrokona, to Bara-Ari, with branch from Shambhuganj to Gauripur	36	22,16,000	
8	Singhjani, *vid* Sherpur, to Nalitabari	25	12,39,000	
9	Sirajganj-Ullapara	18	11,00,000	
	Madras—			
10	Tinnevelly-Tiruchendur	38	20,52,000	
	Punjab—			
11	Rawalpindi-Murree, with extensions to Kuldana and Gharial	40	36,89,000	

(*a*) The share capital of the proposed company is £250,000, which, at ₹15=£1, is equivalent to ₹37,50,000.
(*b*) Represents the distance between Aden and Nobat Dakim, *vid* Lahej. The length of the alternative line is not stated.

APPENDIX 40—*contd.*

STATEMENT C.

Memorandum on the construction of railways.

Open lines on 1st April 1905.

		Miles.	Miles.
(i)	Eastern Bengal	278·68	
	North-Western	(a) 3,185·56	4,629·29
	Oudh and Rohilkhand	(b) 1,165·05	
	Agra-Delhi Chord (c)	119·94	
	Bengal Central (d)	127·69	
	Bengal-Nagpur	1,695·67	
	Bezwada Extension (e)	20·58	
(ii)	Bhopal-Itarsi (*British section*) (c)	19·11	6,946·33
	East Indian	1,962·25	
	Godhra-Rutlam-Nagda (f)	141·14	
	Great Indian Peninsula	1,561·63	
	Indian Midland (c)	807·13	
	Madras (North-East line) (g)	(h) 497·19	
(iii)	Bombay, Baroda and Central India	(i) 604·35	1,408·36
	Madras	904·01	
(iv)	Hardwar-Dehra (j)	...	32·04
	South Behar (k)	78·76	
(v)	Southern Punjab (l)	425·33	659·57
	Tapti Valley (f)	155·48	
(vi)	A. Delhi-Umballa-Kalka (k)	...	162·36
	B. Tarkessar (k)	...	22·23
	Bhopal-Itarsi (*Native State section*) (c)	44·28	
	Bhopal-Ujjain (c)	113·27	
	Bina-Goona-Baran (c)	146·83	
	Kolar Gold-fields (g)	9·98	709·93
	A. Nagda-Ujjain (f)	34·32	
	Nizam's Guaranteed State	330·13	
	Petlad-Cambay (Anand-Tarapur section) (f)	21·50	
(vii)	Petlad-Cambay (Tarapur-Cambay section) (f)	10·92	
	Jammu and Kashmir (*Native State section*) (l)	15·99	
	Ludhiana-Dhuri-Jakhal (l)	78·66	201·70
	B. Rajpura-Bhatinda (l)	107·05	
	Cawnpore-Burhwal (*Metre gauge link*)	(m) 79·60	
	Eastern Bengal—		
	Dacca section	85·62	
(viii)	Northern, Behar and Kaunia-Dhubri sections (*including the Ranaghat-Krishnagar and Teesta-Kurigram branches and the British section of the Santrabari extension*)	606·71	772·23
	Assam-Bengal	740·38	
	Burma	1,340·15	
	Guntakal-Mysore frontier (n)	119·50	
	Jodhpur-Hyderabad (*British section*) (o)	123·98	
	Lucknow-Bareilly (p)	237·04	
	Mysore section (Southern Mahratta) (n)	296·22	
(ix)	Nilgiri (q)	16·99	7,354·41
	Palanpur-Deesa (f)	17·28	
	Rajputana-Malwa (f)	(g) 1,691·85	
	South Indian	1,123·13	
	Southern Mahratta	1,042·04	
	Tinnevelly-Quilon (Travancore) (*British section*) (r)	60·49	
	Tirbeet (s)	565·45	
(x)	Tanjore-District Board (r)	...	99·46
	Ahmedabad-Dholka (f)	33·50	
	Ahmedabad-Parantij (f)	54·70	
(xi)	Mymensingh-Jagannathganj (t)	51·37	174·47
	Noakhali (Bengal) (u)	34·90	
	A. Rohilkund and Kumaon	...	53·92
	B. Dibru-Sadiya	...	77·50
(xii)	C. Bengal-Dooars	...	36·40
	Bengal and North-Western	901·60	
	D. Bengal Dooars Extensions	116·56	1,023·15
	Deognur	4·79	
(xiii)	Ledo and Tikak-Margherita (v)	...	8·50
	Bhavnagar-Gondal-Junagad-Porbandar	(w) 334·19	
	Bikaner	245·36	
	Dhrangadra (x)	20·83	
	A. Jamnagar (x)	(y) 54·22	1,321·74
	Jetalsar-Rajkot (x)	46·21	
	Jodhpur	463·89	
	Morvi (x)	(z) 99·75	
	Udaipur-Chitor	67·30	
(xiv)	Birur-Shimoga (n)	37·92	
	Gaekwar's Mohsana (f)	92·63	
	Hindupur (Yesvantpur-Mysore frontier) (n)	51·35	
	Hyderabad-Godavari Valley (c)	391·13	
	Kolhapur (n)	29·27	782·20
	Mysore-Nanjangud (n)	15·80	
	B. Shoranur-Cochin (g)	64·75	
	Tinnevelly-Quilon (Travancore) (*Native State section*) (r)	57·98	
	Vijapur-Kalol-Kadi (f)	41·37	
	Karaikkal-Peralam (r)	14·05	
(xv)	Pondicherry (r)	7·85	73·60
	West of India Portuguese (n)	51·10	
	Dandot Light (2′ 0″) (l)	6·18	
(xvi)	Jorbat (2′ 6″)	30·23	165·41
	Khushalgarh-Kohat-Thal (2′ 6″) (l)	91·73	
	Nowshera-Durgai (2′ 6″) (l)	40·25	
(xvii)	Jubbulpore-Gondia Extension (2′ 6″) (aa)	213·77	270·01
	Raipur-Dhamtari (2′ 6″) (aa)	56·24	
	Darjeeling-Himalayan (2′ 0″)	51·00	
	A. Thaton-Duyinzaik (2′ 6″)	7·76	58·76
	Baraset-Basirhat Light (2′ 6″)	26·06	
	Bukhtiarpur-Bihar Light (2′ 6″)	18·50	
(xviii)	B. Howrah-Amta Light (2′ 0″)	37·19	121·60
	Howrah-Sheakhala Light (2′ 0″)	19·75	
	Tezpur-Balipara Light (2′ 6″)	20·10	
	Parsi Light (2′ 6″)	21·59	
	C. Kalka-Simla (2′ 6″)	59·44	120·53
	Powayan Light (2′ 6″) (p)	39·50	
(xix)	Tarakeshwar-Magra Light (2′ 6″)	...	33·27
	Gaekwar's Dabhoi (2′ 6″) (f)	91·49	
	Gwalior Light (2′ 0″) (c)	183·53	
	A. Mourbhanj (2′ 6″) (aa)	32·10	372·11
(xx)	Parlakimedi Light (2′ 6″) (aa)	24·63	
	Rajpipla (2′,6″) (f)	37·37	
	B. Cooch Behar (2′ 6″) (t)	...	33·60

At the commencement of 1905-1906, *i.e.*, on the 1st April 1905, the total length of railways open for traffic was 27,727·68 miles, made up as follows :—

		Miles.	Miles.
5′ 6″ gauge—			
(i)	State lines worked by the State	4,629·29	
(ii)	State lines worked by companies	6,946·33	
(iii)	Companies' lines guaranteed by Government under the old contracts	1,408·36	
(iv)	Companies' lines guaranteed by Government under modern contracts	32·04	
(v)	Branch line companies' railways assisted by Government under "rebate" terms	659·57	
(vi)	Assisted companies' lines—		
	A. Subsidized by the Government of India	162·36	
	B. Receiving land only from Government	22·23	
		184·59	
(vii)	Native State lines—		
	A. Worked by companies	709·93	
	B. Worked by State railway agency	201·70	
		911·63	
			14,771·81
3′ 3¾″ gauge—			
(viii)	State lines worked by the State	772·23	
(ix)	State lines worked by companies	7,354·41	
(x)	District Boards' lines	99·46	
(xi)	Branch line companies' railways assisted by Government under "Rebate" terms	174·47	
(xii)	Assisted companies' lines—		
	A. Subsidized by the Government of India	53·92	
	B. Subsidized by Local Governments	77·50	
	C. Subsidized by District Boards	36·40	
	D. Receiving land only from Government	1,023·15	
		1,190·97	
(xiii)	Unassisted companies' lines	8·50	
(xiv)	Native State lines—		
	A. Worked by Native States	1,321·74	
	B. Worked by companies	782·20	
		2,103·94	
(xv)	Lines in Foreign territory	73·60	
			11,777·58
Special (2′ 6″ and 2′ 0″) gauges—			
(xvi)	State lines worked by the State	168·41	
(xvii)	State lines worked by companies	270·01	
(xviii)	Assisted companies' lines—		
	A. Subsidized by Local Governments	58·76	
	B. Subsidized by District Boards	121·60	
	C. Receiving land only from Government	120·53	
		300·89	
(xix)	Unassisted companies' lines	33·27	
(xx)	Native State lines—		
	A. Worked by companies	372·11	
	B. Worked by State railway agency	33·60	
		405·71	
			1,178·29
	TOTAL		27,727·68

(a) Includes 5·63 miles of military line not used for public traffic and 26·28 miles of mixed (5′ 6″ and 3′ 3¾″) gauge line between Bhatinda and Kot-Kapura, worked over by the North-Western State and Rajputana-Malwa railways.

(b) Includes 16·79 miles of mixed (5′ 6″ and 3′ 3¾″) gauge line between Burhwal and Bara Banki, 0·35 mile on the Cawnpore Bridge and 1·21 miles of 3′ 3¾″ gauge line between the Oudh and Rohilkhand State Railway Cantonment and the Bengal and North-Western Railway City stations at Benares.

(c) Worked by the Great Indian Peninsula Railway Company.

(d) Although for convenience classed amongst State railways, this line is the property of the Bengal Central Railway Company.

(e) Worked by His Highness the Nizam's Guaranteed State Railways Company.

(f) Worked by the Bombay, Baroda and Central India Railway Company.

(g) Worked by the Madras Railway Company.

(h) Includes 2·66 miles of mixed (5′ 6″ and 3′ 3¾″) gauge line between Bezwada and Kistna Block hut and, 0·31 miles of 3′ 3¾″ gauge line between Kistna Block hut and Tadipalli.

(i) Includes 39·23 miles of 3′ 3¾″ gauge line between Viramgam and Wadhwan.

(j) Worked by the Oudh and Rohilkhand State Railway.

(k) Worked by the East Indian Railway Company.

(l) Worked by the North Western State railway.

(m) Excludes 3·66 miles of the Lucknow-Bareilly railway between Aishbbagh and Daliganj, worked over, but includes 16·79 miles of mixed (5′ 6″ and 3′ 3¾″) gauge line between Burhwal and Bara Banki and 0·59 mile of the Oudh and Rohilkhand State railway on the Cawnpore bridge.

(n) Worked by the Southern Mahratta Railway Company.

(o) Worked by the Jodhpur-Bikaner railway.

(p) Worked by the Rohilkhand and Kumaon Railway Company.

(q) Includes 2·10 miles at Ujjain, 2·07 miles between Agra Cantonment and Jumna East Bank and 0·94 mile between Lahori Gate Cabin and Brewery Cabin, Delhi, laid on the 5′ 6″ gauge and 26·28 miles of mixed (5′ 6″ and 3′ 3¾″) gauge line between Kot-Kapura and Bhatinda, worked over by the Rajputana-Malwa and North Western State Railways.

(r) Worked by the South Indian Railway Company.

(s) Worked by the Bengal and North-Western Railway Company.

(t) Worked by the Eastern Bengal State Railway.

(u) Worked by the Assam-Bengal Railway Company.

(v) Worked by the Assam Railways and Trading Company.

(w) Includes 5·23 miles of Bhavnagar Dock estates and Junagad quarry lines.

(x) Worked by the Bhavnagar-Gondal-Junagad-Porbandar railway.

(y) Includes 3·93 miles of the Bedi Bandar Dock estate lines.

(z) Includes 16·75 miles of 2′ 6″ gauge line between Vankaner and Morvi.

(aa) Worked by the Bengal-Nagpur Railway Company.

APPENDIX 40—*contd.*

And the mileage under construction or sanctioned for construction on the same date, *viz.*, 1st April 1905, was 3,186·80 miles as follows :—

	Miles.	Miles
5′ 6″ gauge—		
(i) State lines worked by the State		546·44
(ii) State lines worked by companies		476·48
(iii) Branch line companies' railways assisted by Government under "Rebate" terms		154·00
(iv) Native State line worked by Company		1·39
		1,178·31
3′ 3½″ gauge—		
(v) State lines worked by the State		300·87
(vi) State lines worked by companies		609·34
(vii) District Boards' lines		5·53
(viii) Assisted companies' lines—		
A. Subsidized by the Government of India	148·00	
B. Receiving land only from Government	116·94	
	264·94	
(ix) Native State lines worked by companies	72·85	
		1,253·53
Special (2′ 6″ and 2′ 0″) gauges—		
(x) State lines worked by the State		6·80
(xi) State lines worked by companies		325·52
(xii) Assisted companies' lines—		
A. Subsidized by District Boards	105·50	
B. Receiving land only from Government	214·66	
	320·16	
(xiii) Native State lines—		
A. Worked by Native States	11·86	
B. Worked by companies	68·60	
C. Worked by State railway agency	22·02	
	102·48	
	754·96	
TOTAL		3,186·80

There was thus a grand total of railways completed and in hand, on the 1st April 1905, of miles . . . . . 30,914·48

Lines under construction and sanctioned on 31st March 1905.

		Miles.	Miles.	Miles.
(i)	Eastern Bengal—			
	Kankurgachi Chord	2·25		
	Panchooria to the river Ganges (a)	6·00	105·75	
	Ranaghat to Lalgola Ghat	97·50		
	Nagda-Muttra (Southern section)—			
	Nagda to the crossing of the Chambal river		141·53	546·44
	North Western—			
	From a point 12 miles south of Quetta to Nushki	63·26		
	Sargoda to Shorkot Road	103·14	241·67	
	Shahdra to Sangla	55·17		
	Oudh and Rohilkhand—			
	Phaphamau to Zafarabad		57·50	
	Azhikal-Mangalore		77·27	
	Bengal-Nagpur—			
	Bhojudih to Hariharpur	26·96		
	Bhojudih to Parthadihi	3·28	32·64	
	Malkera to Mohuda	3·40		
	East Indian—			
	Bhagalpur to Bausi	31·04		
	Etmadpur chord	1·11		
	Khurja to Hapur	39·49		
	Mile 170½ from Howrah on the Jharia branch to Chandore	4·16	282·00	
	Tasra siding	1·75		
	Ondal to Sainthia	44·93		
	Manpur to Dhanbaid	121·49		
	Nagri to Kasunda	1·59		
	Mainpuri to Farukhabad	36·44		
	Great Indian *Peninsula*—			
	Kurla to Mazagaon	6·51		
	Mahim link	1·32	45·42	
	Warora to Bellarpur	37·59		
	Indian Midland—			
	Portion of Agra-Balinganj branch		2·24	
	Madras (North-East line)—			
	Korukkuppettai to Basin Road		0·85	
	Salem-Attur (*b*)		30·06	
(ii)	Southern Punjab Extension—			
	Ludhiana to MacLeod Ganj			154·00
(iii)	Petlad-Cambay (Taraspur-Cambay section)—			
	Cambay to Cambay Bandar			1·39
(iv)	Eastern Bengal—			
	Golokganj to the Brahmaputra river opposite Gauhati		151·62	
	Katihar to Godagari		105·00	300·87
	Kaunia to Bonarpara		44·25	
	Bellary-Rayadrug		33·00	
	Burma Extension—			
	Henzada to Kyangin	65·66	156·93	
	Pegu to Martaban (*b*)	121·27		
	Hospet-Kottur		44·10	
	Nilgiri—			
	Coonoor to Ootacamund		11·50	
	Rajputana-Malwa—			
	Narnaul to Phulera		100·60	609·34
(v)	South Indian—			
	Mandapam to Rameswaram Temple	19·12		
	Tangachimedam to Port Ampthill	1·71	20·83	
	Tiruppachettai to Sivagunga	9·00		
	Tirhoot—			
	Bairagnia to Bhikna Thoree	79·65		
	Bettiah to Bagaha	110·35		
	Bhagalpur to Bhagalpur Ghat	4·50	212·38	
	Mansi to Bhaptiahi	60·37		
	Saharsa to Murliganj	18·61		
(vi)	Tanjore District Board—			
	Adirampatnam Salt siding	1·00		
	Arantangi Quarry branch	3·90	5·53	
	Thambikkottai Salt siding	0·63		
(vii)	A. Rohilkund and Kumaon—			
	Bareilly to Soron	56·00		
	Lalkua to Kashipur	45·00	148·00	
	Moradabad to Ramnagar	47·00		
	B. Bengal and North-Western—			
	Barhni (Bahadurganj) to Tulsipur	22·54		
	Dharonda to Maharajganj	3·90		
	Gainsari to Jarwa	12·56	116·94	
	Gorakhpur to Bagaha	60·94		
	Savan to Thawe	17·00		
(viii)	Jaipur—			
	Sanganer to Siwai-Madhopur		72·85	
(ix)	Jullundur-Kapurthala-Sultanpur (*British section*) (*a*)—			
	Jullundur to the British Frontier			6·80
(x)	Gondia-Chanda (2′ 6″)—			
	Gondia to Chanda (*b*)	148·65	212·40	
	Pauni (Brahmapuri) to Nagpur (*b*)	63·75		
	Jubbulpore-Gondia Extension (2′ 6″)			
	Chindwara to Burrecie	21·36		
	Jubbulpore to Burgi	17·84	60·33	325·52
	Khursadeyi to Sirgora	7·76		
	Nainpur to Mandla	13·37		
	Morappur-Dharampuri (2′ 6″)		18·36	
	Tirupattur-Krishnagiri (2′ 6″)		25·43	
(xi)	A. Howrah-Amta Light (2′ 0″)—			
	Autpur to Champadanga (*b*)	9·00	12·50	
	Autpur to Rajbolhat (*b*)	3·50		
	Madura District Light (2′ 6″)—			
	Ammayanayakkanur to Kotagudi	55·00		106·50
	Periyakulam to Krishna-Manaik's Tope	5·00	93·00	
	Theni to Karuvanath	33·00		
	Barsi Light (2′ 6″)—			
	Barsi Road Junction to Pandharpur	30·67	57·37	
	Barsi Town to Tadwala	26·70		
	B. Dwara-Therria Light (2′ 6″)—			
	Dwara to Maolong (*d*)	13·50	19·50	
	Maolong to Therria Ghat (*b*)	6·00		214·66
	Matheran (2′ 0″)—			
	Neral to Matheran		13·79	
	Shahdara (Delhi)-Saharanpur Light (2′ 6″)—			
	Baraut to Meerut	30·00	125·00	
	Shahdara to Saharanpur	95·00		
(xii)	A. Cutch (2′ 6″)—			
	Anjar to Tuna			11·86
(xiii)	B. Gwalior Light (2′ 6″)—			
	Sabalgarh to Shinpur			68·60
	C. Jullundur-Kapurthala-Sultanpur (*Native State section*)—			
	Sultanpur to the British Frontier (*c*)			22·02

(*a*) Constructed but not worked.
(*b*) Commencement of work not authorised.
(*c*) Commencement of work not authorised and question of gauge not finally settled.
(*d*) Completion deferred.

APPENDIX 40—*contd.*

New lines authorised.

		Miles.	Miles.	Miles.
(i)	Nagda-Muttra—			
	Crossing of the Chambal river to Muttra	202·46	242·46	
	Kotah to Baran	40·00		
	North Western—			265·46
	Kacha Garhi to mile 23	23·00		
(ii)	Agra-Delhi Chord—			
	Kosi to Sanket	6·06		
	Bengal-Nagpur—			
	Branch line near Khanoodih	1·97		
	East Indian—			80·67
	Agra direct access	1·75		
	Borachuck to Sodepur	4·50		
	Hooghly to Katwa	66·20	72·64	
	Chord line between the East Indian and Oudh and Rohilkhand State railways near Moghal Sarai.	1·19		
(iii)	Amritsar-Patti			26·85
(iv)	Eastern Bengal—			
	Forbesganj to the Nepal Frontier			6·50
(v)	Assam-Bengal—			
	Akhaura to Ashuganj	19·00		
	Burma—			25·70
	Thamaing to Malagaon	6·70		
(vi)	Berwada-Masulipatam			45·90
(vii)	Dibru-Sadiya—			
	Talap to Shaikwaghat			8·50
(viii)	A. Morvi—			
	Stone Quarry branch (*a*)			2·75
	B. Gaekwar's Mehsana—			
	Chaosama to Becharji	17·27	38·47	
	Manund Road to Harij	21·20		42·47
	Sangli—			
	Miraj to Sangli Town	4·00		
(ix)	Parulia-Ranchi (2′ 6″)			72·26
(x)	Cutch (2′ 6″)—			
	Anjar to Bhuj	25·38		
	Dholpur-Bari (2′ 6″)	19·25		44·63

Lines opened or likely to be opened.

		Miles.	Miles.	Miles.
(xi)	Eastern Bengal—			
	Panchooria to the river Ganges	6·00	103·85	
	Ranaghat to Lalgola Ghat	*97·85		187·14
	North Western—			
	Spezand Junction to Nushki	*83·29		
(xii)	Agra-Delhi Chord—			
	Kosi to Sanket	6·06		
	Bengal-Nagpur—			
	Mohuda to Malkera	*5·70		49·17
	East Indian—			
	Etmadpur Chord	1·11	37·41	
	Mainpuri to Farukhabad	*36·30		
(xiii)	Southern Punjab Extension—			
	MacLeodganj to Ferozepore City	*76·88		
	Ferozepore Cantonment to Ludhiana	*75·90		152·78
(xiv)	Eastern Bengal—			
	Bonarpara to Kaunia	*44·47		
	Golokganj to Kokrajhar	35·37		79·84
(xv)	Bellary-Rayadrug	*33·26		
	Hospet-Kottur	*43·06		
	Rajputana-Malwa—			
	Phulera to Narnaul	*100·53		283·43
	Tirhoot—			
	Bairagnia to Narkatiaganj	58·05		
	Bhagalpur to Bhagalpur Ghat	*4·29	106·59	
	Bettiah to Bhikna Thoree	44·25		
(xvi)	A. Rohilkund and Kumaon—			
	Bareilly to Soron			56·00
	B. Bengal and North-Western—			
	Barhni to Tulsipur	*23·05		
	Gainsari to Jarwa	12·56		35·61
(xvii)	Jaipur—			
	Sanganer to Nawai			32·25
(xviii)	Jubbulpore-Gondia Extension (2′ 6″)—			
	Burgi to Jubbulpore	*16·96		
	Morappur-Dharmapuri (2′ 6″)	18·38		60·75
	Tirupattur-Krishnagiri (2′ 6″)	25·43		
(xix)	Barsi Light (2′ 6″)—			
	Barsi Town to Kuslamb			7·00
(xx)	Cutch (2′ 6″)—			
	Anjar to Tuna			11·86

During 1905-1906, *i.e.*, from 1st April 1905 to the 31st March 1906, 621·69 miles of new railway have been authorised as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by the State	265·46	
(ii) State lines worked by companies	80·67	
(iii) Branch line company's railway assisted by Government under "Rebate" terms	26·85	372·98
3′ 3⅜″ gauge—		
(iv) State lines worked by the State	6·50	
(v) State lines worked by companies	25·70	
(vi) District Boards' lines	45·90	
(vii) Assisted company's lines subsidized by Local Governments	8·50	
(viii) Native State lines—		
A. Worked by Native States 2·75		
B. Worked by companies 42·47		
	45·22	131·82
Special (2′ 6″ and 2′ 0″) gauges—		
(ix) State lines worked by companies	72·26	
(x) Native State lines worked by Native States	44·63	116·89
TOTAL		621·69

And 955·83 miles have been or are likely to be opened to public traffic as follows:—

	Miles.	Miles.
5′ 6″ gauge—		
(xi) State lines worked by the State	187·14	
(xii) State lines worked by companies	49·17	
(xiii) Branch line companies' railways assisted by Government under "Rebate" terms	152·78	389·09
3′ 3⅜″ gauge—		
(xiv) State lines worked by the State	79·84	
(xv) State lines worked by companies	283·43	
(xvi) Assisted companies' lines—		
A. Subsidized by the Government of India 56·00		
B. Receiving land only from Government 35·61		
	91·61	
(xvii) Native State lines worked by companies	32·25	487·13
Special (2′ 6″ and 2′ 0″) gauges—		
(xviii) State lines worked by companies	60·75	
(xix) Assisted companies' lines receiving land only from Government	7·00	
(xx) Native State lines worked by companies	11·86	79·61
TOTAL		955·83

(*a*) This branch is on the 3′ 6″ gauge.
* Correction of mileage.

APPENDIX 40—*contd.*

The total length of open line at the commencement of 1906-1907, *i.e.*, on the 1st April 1906, will, therefore, be 28,683·81 miles, comprising—

	Miles.	Miles.
5′ 6″ gauge—		
(i) State lines worked by the State	4,941·20	
(ii) State lines worked by companies	7,375·05	
(iii) Companies' lines guaranteed by Government under the old contracts	904·01	
(iv) Companies' lines guaranteed by Government under modern contracts	32·04	
(v) Branch line companies' railways assisted by Government under "Rebate" terms	812·35	
(vi) Assisted companies' lines—		
A. Subsidized by the Government of India	162·36	
B. Receiving land only from Government	22·23	
	184·59	
(vii) Native State lines—		
A. Worked by companies	709·93	
B. Worked by State railway agency	201·70	
	911·63	
		15,160·87
3′ 3¾″ gauge—		
(viii) State lines worked by the State	852·00	
(ix) State lines worked by companies	7,663·74	
(x) District Boards' lines	99·46	
(xi) Branch line companies' railways assisted by Government under "Rebate" terms	139·57	
(xii) Assisted companies' lines—		
A. Subsidized by the Government of India	118·92	
B. Subsidized by Local Governments	77·50	
C. Subsidized by District Boards	36·40	
D. Receiving land only from Government	1,058·76	
	1,291·58	
(xiii) Unassisted companies' lines	8·50	
(xiv) Native State lines—		
A. Worked by Native States	1,321·63	
B. Worked by companies	814·45	
	2,136·08	
(xv) Lines in Foreign Territory	73·60	
		12,264·53
Special (2′ 6″ and 2′ 0″) gauges—		
(xvi) State lines worked by the State	168·41	
(xvii) State lines worked by companies	330·96	
(xviii) Assisted companies' lines—		
A. Subsidized by Local Governments	58·76	
B. Subsidized by District Boards	121·60	
C. Receiving land only from Government	127·53	
	307·89	
(xix) Unassisted companies' lines	33·27	
(xx) Native State lines—		
A. Worked by Native States	11·86	
B. Worked by companies	372·42	
C. Worked by State railway agency	33·60	
	417·88	
		1,258·41
TOTAL		§28,683·81

Open lines on 1st April 1906.

		Miles.	Miles.
(i)	Eastern Bengal	*507·30	4,941·20
	North Western	(a)3,288·85	
	Oudh and Rohilkhand	(b)1,145·05	
(ii)	Agra-Delhi Chord (c)	126·00	7,375·05
	Bengal Central	(d)	
	Bengal-Nagpur	*1,703·16	
	Bezwada Extension (e)	20·58	
	Bhopal-Itarsi (*British section*) (c)	13·11	
	Bombay, Baroda and Central India	(f) 604·35	
	East Indian	*1,999·99	
	Godhra-Kutlam-Nagda (g)	141·14	
	Great Indian Peninsula	1,561·63	
	Indian Midland (c)	*807·99	
	Madras (North-East line) (h)	(i)497·19	
(iii)	Bombay, Baroda and Central India	†	904·01
(iv)	Madras		32·04
	Hardwar-Dehra (j)		
(v)	South Behar (k)	78·76	812·35
	Southern Punjab (l)	423·33	
	Southern Punjab Extension (l)	162·75	
	Tapti Valley (g)	155·49	
(vi)	A. Delhi-Umballa-Kalka (k)		162·36
	B. Tarkessur (k)		22·23
(vii)	A. Bhopal-Itarsi (*Native State section*) (c)	44·28	709·93
	Bhopal-Ujjain (c)	113·27	
	Bina-Goona-Baran (c)	145·63	
	Kolar Gold-fields (k)	9·83	
	Nagda-Ujjain (g)	34·32	
	Nizam's Guaranteed State	330·13	
	Petlad-Cambay (Anand-Tarapur section) (g)	21·20	
	Petlad-Cambay (Tarapur-Cambay section) (g)	10·92	
	B. Jammu and Kashmir (*Native State section*) (i)	15·99	201·70
	Ludhiana-Dhuri-Jakhal (l)	79·06	
	Rajpura-Bhatinda (l)	107·05	
(viii)	Cawnpore-Barhwal (*Metre gauge link*)	(m)79·60	852·00
	Eastern Bengal—		
	Dacca section	85·92	
	Northern, Behar and Kaunia-Dhubri sections (*including the Ranaghat-Krishnagar and Teesta-Kurigram branches and the British section of the Santrabari extension*)	*686·48	
	Assam-Bengal	776·28	
	Bellary-Rayadrug (n)	33·28	
	Burma	1,340·15	
	Guntakal-Mysore frontier (n)	119·50	
	Hosket-Kottur (n)	43·06	
	Jodhpur-Hyderabad (*British section*) (o)	122·99	
	Lucknow-Bareilly (p)	237·04	
(ix)	Mysore section (Southern Mahratta) (n)	206·22	7,663·74
	Nilgiri (k)	16·99	
	Palanpur-Deesa (g)	17·28	
	Rajputana-Malwa (g)	(q)1,773·38	
	South Indian	*1,123·06	
	Southern Mahratta	1,043·04	
	Tinnevelly-Quilon (Travancore) (*British section*) (r)	*50·48	
	Tirhoot (s)	672·04	
(x)	Tanjore District Board (r)		99·46
(xi)	Ahmedabad-Dholka (g)	33·80	139·57
	Ahmedabad-Patnatij (g)	54·70	
	Mymensingh-Jamalpur-Jagannathganj (t)	51·37	
	Noakhali (Bengal)	‡	
(xii)	A. Rohilkund and Kumaon		118·92
	B. Dibru-Sadiya		77·50
	C. Bengal-Dooars		36·40
	D. Bengal and North-Western	937·41	1,058·76
	Bengal-Dooars Extensions	116·56	
	Deoghur	4·79	
(xiii)	Ledo and Tikak-Margherita (u)		8·50
(xiv)	A. Bhavnagar-Gondal-Junagad-Forbandar	(v)334·19	1,321·63
	Bikaner	245·35	
	Dhrangadra (w)	20·83	
	Jamnagar (w)	(x)54·23	
	Jetalsar-Rajkot (w)	46·21	
	Jodhpur	463·99	
	Morvi	(y)*89·64	
	Udaipur-Chitor	67·30	
	B. Birur-Shimoga (n)	37·92	814·45
	Gackwar's Mehsana (g)	92·63	
	Hindupur (Tirupatipur-Mysore frontier) (n)	51·25	
	Hyderabad-Godavari Valley (o)	391·13	
	Jaipur (g)	32·25	
	Kolhapur (n)	29·27	
	Mysore Nanjangud (n)	18·80	
	Shoranur-Cochin (k)	64·75	
	Tinnevelly-Quilon (Travancore) (*Native State section*) (r)	57·98	
	Vijapur-Kalol-Kadi (g)	41·37	
(xv)	Karaikkal-Peralam (r)	14·65	73·60
	Pondicherry (r)	7·85	
	West of India Portuguese (z)	51·10	
(xvi)	Dandot Light (2′ 0″) (l)	6·18	168·41
	Jorhat (2′ 0″)	30·25	
	Khushalgarh-Kohat-Thal (2′ 6″) (l)	91·73	
	Nowshera-Dargai (2′ 6″) (l)	40·25	
(xvii)	Jubbulpore-Gondia Extension (2′ 6″) (s)	*230·63	330·96
	Korappur-Dharmapuri (3′ 6″) (h)	19·36	
	Raipur-Dhamtari (2′ 6″) (s)	56·24	
	Tirupattur-Krishnagiri (2′ 6″) (h)	25·43	
(xviii)	A. Darjeeling-Himalayan (2′ 0″)	51·00	58·76
	Thaton-Duyinzaik (2′ 6″)	7·76	
	B. Barasat-Basirhat Light (2′ 6″)	26·06	121·60
	Bukhtiarpur-Behar Light (2′ 6″)	19·50	
	Howrah-Amta Light (2′ 0″)	37·19	
	Howrah-Sheakhala Light (2′ 0″)	19·75	
	Tezpur-Balipara Light (2′ 6″)	20·10	
	C. Barsi Light (2′ 6″)	28·59	127·53
	Kalka-Simla (2′ 6″)	59·44	
	Powayan Light (2′ 6″) (p)	39·50	
(xix)	Tarakeshwar-Magra Light (2′ 6″)		33·27
(xx)	A. Cutch (2′ 6″)		11·86
	B. Gackwar's Dabhoi (2′ 6″) (g)	94·49	372·42
	Gwalior Light (2′ 0″) (c)	183·53	
	Mourbhanj (2′ 6″) (z)	*32·41	
	Parlakimedi Light (2′ 6″) (z)	24·63	
	Rajpipla (2′ 6″) (g)	37·37	
	C. Cooch Behar (2′ 6″) (t)		33·60

(a) See foot-note (a) on page 217.
(b) See foot-note (b) on page 217.
(c) Worked by the Great Indian Peninsula Railway Company.
(d) Although for convenience classed amongst State railways, this line was the property of the Bengal Central Railway Company. It was purchased by the State on the 1st July 1905, and amalgamated with the 5′ 6″ gauge section of the Eastern Bengal State railway.
(e) Worked by His Highness the Nizam's Guaranteed State Railways Company.
(f) Includes 39·25 miles of 3′ 3¾″ gauge line between Viramgam and Wadhwan.
(g) Worked by the Bombay, Baroda and Central India Railway Company.
(h) Worked by the Madras Railway Company.
(i) See foot-note (h) on page 217.
(j) Worked by the Oudh and Rohilkhand State Railway.
(k) Worked by the East Indian Railway Company.
(l) Worked by the North Western State railway.
(m) See foot-note (m) on page 217.
(n) Worked by the Southern Mahratta Railway Company.
(o) Worked by the Jodhpur-Bikaner Railway.
(p) Worked by the Rohilkund and Kumaon Railway Company.
(q) See foot-note (q) on page 217.
(r) Worked by the South Indian Railway Company.
(s) Worked by the Bengal and North-Western Railway Company.
(t) Worked by the Eastern Bengal State Railway.
(u) Worked by the Assam Railways and Trading Company.
(v) Includes 8·23 miles of Bhavnagar Dock estates and Junagad quarry lines.
(w) Worked by the Bhavnagar-Gondal-Junagad-Porbandar Railway.
(x) Includes 3·93 miles of the Bedi Bandar Dock estate lines.
(y) Includes 16·75 miles of 2′ 6″ gauge line between Vankaner and Morvi.
(z) Worked by the Bengal-Nagpur Railway Company.

* Correction of mileage.
† Purchased by the State with effect from the 1st January 1906 and transferred to State lines worked by Companies.
‡ Purchased by the State with effect from the 1st January 1906 and amalgamated with the Assam-Bengal railway.
§ Made up as follows:—

Open at the commencement of 1906-06	27,727·68
Opened during 1905-06	955·63
	28,683·31
Add—	
Net increase due to corrections of mileage	0·30
	28,683·81

APPENDIX 40—*contd.*

Lines under construction and sanctioned on 31st March 1906.

			Miles.	Miles.	Miles.
	Eastern Bengal—				
		Kankurgachi Chord			2·25
	Nagda-Muttra—				
		Nagda to Muttra	343·98	383·98	
		Kotah to Baran	40·00		
(i)	North Western—				625·23
		Kacha Garhi to mile 23	23·00		
		Sargoda to Shorkot Road	103·14	181·49	
		Shahdara to Sangla	*55·35		
	Oudh and Rohilkhand—				
		Phaphamau to Zafarabad			57·50
	Azhikal-Mangalore				77·27
	Bengal-Nagpur—				
		Bhojudih to Hariharpur	*25·64	29·89	
		Bhojudih to Parthadihi	2·29		
		Branch line near Khanoodih	1·97		
	East Indian—				
		Agra direct access	1·75		
		Bhagalpur to Basni	31·04		
		Borachhak to Sodepur	4·50		
		Chord line between the East Indian and Oudh and Rohilkhand State railway near Moghal Sarai	1·19		
		Hoogly to Katwa	65·20	315·34	
(ii)		Khurja to Hapur	39·49		507·07
		Mile 170½ from Howrah on the Jharia branch to Chandore	4·16		
		Ondal to Sainthia	44·33		
		Manpur to Dhanbaid	121·49		
		Nagri to Kasmuda	1·59		
	Great Indian Peninsula—				
		Kurla to Mazagaon	6·51	45·42	
		Mahim link	1·33		
		Warora to Bellarpur	37·59		
	Indian Midland—				
		Portion of Agra-Balinganj branch			2·24
	Madras (North-East line)—				
		Korukkuppettai to Basin Road			0·85
	Salem-Attur (a)				36·06
(iii)	Amritsar-Patti				26·85
(iv)	Petlad-Cambay (Tarapur-Cambay section)—				
		Cambay to Cambay Bandar			1·39
(v)	Eastern Bengal—				
		Forbesganj to the Nepal Frontier			6·50
		Katihar to Godagari		105·00	227·75
		Kokrajhar to the Brahmaputra river opposite Gauhati		116·25	
	Assam-Bengal—				
		Akhaura to Asbuganj			19·00
	Burma—				
		Thaming to Malagaon			6·70
	Burma Extensions—				
		Henzada to Kyangin	65·66	186·93	
		Pegu to Martaban (a)	121·27		
	Nilgiri—				
(vi)		Coonoor to Ootacamund			11·59
	South Indian—				350·84
		Mandam to Rameswaram Temple	10·12	20·83	
		Tangachimadam to Port Ampthill	1·71		
		Tiruppachettai to Sivaganga	9·00		
	Tirhoot—				
		Mansi to Bhaptiahi	60·37	105·68	
		Narkatiaganj to Bagaha	26·93		
		Saharsa to Murliganj	18·01		
(vii)	Bezwada-Masulipatam			45·90	
	Tanjore District Board—				51·43
		Adirampatnam Salt siding	1·00	5·53	
		Arsangi Quarry branch	3·30		
		Thambikottai Salt siding	0·63		
	A. Rohilkund and Kumaon—				
		Lalkua to Kashipur		45·00	93·00
(viii)		Moradabad to Ramnagar		47·00	
	B. Dibru-Sadiya—				
		Talap to Shaikhwaghat			8·50
	C. Bengal and North-Western—				
		Dharonda to Maharajganj		3·20	
		Gorakhpur to Bagaha		60·94	81·34
		Savan to Thawe		17·00	
	A. Morvi—				
		Stone Quarry branch (b)			2·75
	Gaekwar's Mehsana—				
(ix)		Chausama to Bechraji	17·27	38·47	
		Manund Road to Harij	21·20		
	B. Jaipur—				83·07
		Nawai to Siwai-Madhopur		40·60	
	Sangli—				
		Miraj to Sangli Town			4·00
(x)	Jullundur-Kapurthala-Suitanpur (*British section*) (c)—				
		Jullundur to the British frontier			6·80
	Gondia-Chanda (2′ 6″)—				
		Gondia to Chanda (a)	148·05	212·40	
		Pauni (Brahmaputri) to Nagpur (a)	63·75		
	Jubbulpore-Gondia Extension (2′ 6″)—				
(xi)		Chhindwara to Burcoole	21·36	61·26	345·92
		Kursadeyi to Sirgora	7·74		
		Neimpur to Mandla	*32·16		
	Purulia-Ranchi (2′ 6″)				72·26
	R. Howrah-Amta Light (2′ 0″)—				
		Autpur to Champadanga (a)		9·00	13·50
		Autpur to Rajbulhat (a)		3·50	
	Barsi Light (2′ 6″)—				
(xii)		Barsi Road Jn. to Pandharpur	30·67	50·37	
		Kusumb to Tadwala	19·70		
	Dwara-Therria Light (2′ 6″)—				
		Dwara to Maolong (d)	13·50	19·50	
	B	Maolong to Therria Ghat (a)	6·00		207·66
	Matheran (2′ 0″)—				
		Neral to Matheran			12·79
	Shahdara (Delhi)-Saharanpur Light (2′ 6″)—				
		Baraut to Meerut	30·00	125·00	
		Shahdara to Saharanpur	95·00		
	Cutch (3′ 6″)—				
	A	Anjar to Bhuj		25·38	44·63
		Dholpur-Bari (2′ 6″)		19·25	
(xiii)	B. Gwalior Light (2′ 0″)—				
		Sabalgarh to Shiupur			66·60
	C. Jullundur-Kapurthala-Suitanpur (*Native State section*)—				
		Sultanpur to the British Frontier (c)			22·03

(a) Commencement of work not authorized.
(b) This branch is on the 2′ 6″ gauge.
(c) Commencement of work not authorized and question of gauge not finally settled.
(d) Completion deferred.
* Correction of mileage.

† Made up as follows:—

	Miles.
Completed and in hand at the beginning of 1905-06	30,914·48
Sanctioned during 1905-06	621·69
	31,536·17
Add—	
Increase in mileage of the Mandla branch of the Jubbulpur-Gondia extension	9·47
	31,545·64
Deduct—	
Madura District Light railway abandoned	93·00
Net decrease due to corrections of mileage	2·29
	95·29
	31,450·35

And the mileage under construction or sanctioned for construction on the 31st March 1906 will be 2,766·54 miles, made up as follows:—

	Miles.	Miles.	Miles.
5′ 6″ gauge—			
(i) State lines worked by the State		625·22	
(ii) State lines worked by companies		507·07	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms		26·85	
(iv) Native State lines worked by companies		1·39	
			1,160·53
3′ 3¾″ gauge—			
(v) State lines worked by the State		227·75	
(vi) State lines worked by companies		350·54	
(vii) District Boards' lines		51·43	
(viii) Assisted companies' lines—			
A. Subsidized by the Government of India	92·00		
B. Subsidized by Local Government	8·50		
C. Receiving land only from Government	81·84		
		182·34	
(ix) Native State lines—			
A. Worked by Native States	2·75		
B. Worked by companies	83·07		
		85·82	
			897·88
Special (2′ 6″ and 2′ 0″) gauges—			
(x) State lines worked by the State		6·80	
(xi) State lines worked by companies		345·92	
(xii) Assisted companies' lines—			
A. Subsidized by District Boards	12·50		
B. Receiving land only from Government	207·66		
		220·16	
(xiii) Native State lines—			
A. Worked by Native States	44·63		
B. Worked by companies	68·60		
C. Worked by State railway agency	22·02		
		135·25	
			708·13
	TOTAL		2,766·54

Making a grand total of railways completed and in hand, at the commencement of 1906-1907 of miles . †31,450·35

And showing, after allowing for lines abandoned and corrections of mileage, an advance on the previous year of miles . . . . . 535·87

APPENDIX 40—*concld.*

It is expected that the following lengths of unfinished line will be opened for public traffic in 1906-1907 :—

	Miles.	Miles.
5' 6" gauge—		
(i) State lines worked by the State	319·76	
(ii) State lines worked by companies	348·65	
(iii) Branch line companies' railways assisted by Government under "Rebate" terms	26·85	
		695·26
5' 3¾" gauge—		
(iv) State lines worked by companies	105·58	
(v) Assisted companies' lines—	Miles.	
A. Subsidized by the Government of India	92·00	
B. Receiving land only from Government	60·94	
	152·94	
		258·52
Special (2' 6" and 2' 0") gauges—		
(vi) Assisted companies' lines receiving land only from Government		19·70
TOTAL		973·48

Leaving the undermentioned lines for completion in 1907-1908 or later :—

	Miles.	Miles.
5' 6" gauge—		
(vii) State lines worked by the State	205·46	
(viii) State lines worked by companies	158·42	
(ix) Native State lines worked by companies	1·39	
		465·27
5' 3¾" gauge—		
(x) State lines worked by the State	227·75	
(xi) State lines worked by companies	244·96	
(xii) District Boards' lines	51·43	
(xiii) Assisted companies' lines—	Miles.	
A. Subsidized by Local Governments	8·50	
B. Receiving land only from Government	20·90	
	29·40	
(xiv) Native State lines—		
A. Worked by Native States	2·75	
B. Worked by companies	83·07	
	85·82	
		639·36
Special (2' 6" and 2' 0") gauges—		
(xv) State lines worked by the State	6·80	
(xvi) State lines worked by companies	345·92	
(xvii) Assisted companies' lines—	Miles.	
A. Subsidized by District Boards	12·50	
B. Receiving land only from Government	187·96	
	200·46	
(xviii) Native State lines—		
A. Worked by Native States	44·63	
B. Worked by companies	68·60	
C. Worked by State railway agency	22·02	
	135·25	
		658·43
TOTAL		1,793·06

		Miles.	Miles.	Miles
(i)	Eastern Bengal—			
	Kankurgachi Chord		2·25	
	Nagda-Muttra—			
	Nagda to Morak		101·52	
	North-Western—			
	Sargoda to Shorkot Road	103·14	158·49	319·76
	Shahdara to Sangla	55·35		
	Oudh and Rohilkhand—			
	Phaphamau to Zafarabad		57·50	
	Azhikal-Mangalore		77·27	
	Bengal-Nagpur—			
	Bhojudih to Hariharpur		28·64	
	East Indian—			
	Khurja to Hapur	29·49	206·91	348·65
	Manpur to Dhanbaid	121·49		
	Ondal to Saiuthia	44·93		
	Great Indian Peninsula—			
	Warora to Bellarpur		37·59	
	Indian Midland—			
	Portion of the Agra-Ballinganj branch.		2·24	
(iii)	Amritsar-Patti			26·85
(iv)	Tirhoot—			
	Mansi to Bhaptiahi		60·37	
	Narkatiaganj to Bagaha		26·60	105·58
	Saharsa to Murliganj		18·61	
(v)	A. Rohilkhand and Kumaon—			
	Lalkua to Kashipur		45·00	92·00
	Moradabad to Rammagar		47·00	
	B. Bengal and North-Western—			
	Gorakhpur to Bagaha			60·94
(vi)	Barsi Light (2' 6")—			
	Kuslamb to Tadwala			19·70
(vii)	Nagda-Muttra—			
	Morak to Muttra	243·46	282·46	305·46
	Kotah to Baran	40·00		
	North Western—			
	Kacha Garhi to mile 23		23·00	
(viii)	Bengal-Nagpur—			
	Bhojudih to Parthadihi	2·28	4·25	
	Branch line near Khanoodih	1·97		
	East Indian—			
	Agra direct access	1·75		
	Bhagalpur to Bansi	31·04		
	Borachuck to Sodepur	4·50		
	Chord line between the East Indian and Oudh and Rohilkhand State Railways near Moghal Sarai	1·19	109·43	153·42
	Hooghly to Kutwa	65·20		
	Mile 170¾ from Howrah on the Jharia branch to Chandore	4·16		
	Nagri to Kusunda	1·59		
	Great Indian Peninsula—			
	Kurla to Mazagaon	6·51	7·83	
	Mahim link	1·32		
	Madras (North-East line)—			
	Kornkkuppettai to Basin Road		0·85	
	Salem-Attur (*a*)		36·06	
(ix)	Petlad-Cambay (Tarapur-Cambay section)—			
	Cambay to Cambay Bandar			1·39
(x)	Eastern Bengal—			
	Forbesganj to the Nepal Frontier		6·50	
	Katihar to Godagari		105·00	227·75
	Kokrajhar to the Brahmaputra river opposite Gauhati		116·25	
(xi)	Assam-Bengal—			
	Akhaura to Ashuganj		19·00	
	Burma—			
	Thamaing to Malagoan		6·70	
	Burma Extensions—			
	Henzada to Kyangin	65·60	186·93	244·96
	Pegu to Martaban (*a*)	121·27		
	Nilgiri—			
	Coonoor to Ootacamund		11·50	
	South Indian—			
	Mandapam to Rameswaram Temple	10·13		
	Tangachimadam to Port Ampthill	1·71	20·63	
	Tiruppachettai to Sivagunga	9·00		
(xii)	Bezwada-Masulipatam		45·90	
	Tanjore District Board—			51·43
	Adirampattam Salt siding	1·70		
	Arantangi to Quarry branch	3·90	5·53	
	Thambikkottai Salt siding	0·63		
(xiii)	A. Dibru-Sadiya—			
	Talap to Shaikwaghat		6·50	
	B. Bengal and North-Western—			
	Dharonda to Maharajganj		3·90	20·90
	Savan to Thawe		17·00	
(xiv)	A. Morvi—			
	Stone Quarry branch		2·75	
	B. Gaekwar's Mehsana—			
	Chausama to Bechraji	17·27	39·47	83·07
	Mansund Road to Harij	21·20		
	Jaipur—			
	Nawal to Sawai Madhopur		40·60	
	Sangli—			
	Miraj to Sangli Town		4·00	
(xv)	Jullundur-Kapurthala-Sultanpur (*British section*)—			
	Jullundur to the British Frontier (*b*)			6·80
(xvi)	Gondia-Chanda (2' 6")—			
	Gondia to Chanda (*a*)	148·65	212·40	
	Pauni (Brahmapuri) to Nagpur (*a*)	63·75		
	Jubbulpur-Gondia Extension (2' 6")—			
	Chindwara to Burcoole	21·36	61·26	345·92
	Khursedevi to Sirgora	7·76		
	Neimpur to Mandla	32·14		
	Purulia-Ranchi (2' 6")		72·26	
(xvii)	A. Howrah-Amta Light (2' 0")—			
	Autpur to Champadanga (*a*)		9·00	12·50
	Autpur to Rajbulhat (*a*)		3·50	
	B. Barsi Light (2' 6")—			
	Barsi Road Junction to Pandharpur		30·67	
	Dwara-Therria Light (2' 6")			
	Dwara to Maolong (*c*)	13·50	19·50	
	Maolong to Therria Ghat (*a*)	6·00		187·96
	Matheran (2' 6")—			
	Neral to Matheran		12·79	
	Shahdara (Delhi)-Saharanpur Light (2' 6")—			
	Barauti to Meerut	30·00	125·00	
	Shahdara to Saharanpur	95·00		
(xviii)	A. Cutch (2' 6")—			
	Anjar to Bhuj		25·38	44·63
	Dhoipur-Bari (2' 6")		19·25	
	B. Gwalior Light (2' 0")—			
	Sabalgarh to Shiupur			68·60
	C. Jullundur-Kapurthala-Sultanpur (*Native State section*)—			
	Sultanpur to the British Frontier (*b*)			22·02

(*a*) Commencement of work not authorized.
(*b*) Commencement of work not authorized and question of gauge not finally settled.
(*c*) Completion deferred.

APPENDIX 41.

Constitution of a Railway Board, and abolition of the Public Works Department (Railway Branch) of the Government of India.

No. 256 G.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

GENERAL.

Calcutta, the 18th February 1905.

Read—

P. W. D. Resolution No 3386 G., dated the 23rd December 1897.

P. W. D. Resolution No. 293 G., dated the 1st March 1900.

P. W. D. Despatch No. 2 Ry., dated the 7th January 1904, to the Secretary of State for India.

Despatch No. 65 Ry., dated the 19th August 1904, from the Secretary of State for India.

RESOLUTION.—The Government of India have had under consideration the recommendations made in his Report on the Administration and Working of Indian Railways by Mr. Thomas Robertson, C.V.O., Special Commissioner for Indian Railways, with regard to the constitution of a Railway Board to control the railway system in India and its extensions, in place of the Public Works Department, Railway Branch, of the Government of India.

2. The conception of a Railway Board is not new; it has been advocated and considered on various occasions for many years past. Its central idea is that there should be a body of practical business men entrusted with full authority to manage the railways of India on commercial principles, and freed from all non-essential restrictions, or needlessly inelastic rules. In view of the great expansion that has taken place in the railway system of India, and of the necessity which has in consequence arisen for providing more powerful and efficient machinery for the rapid disposal of the increasing business, the Government of India placed before His Majesty's Secretary of State for India certain proposals for the constitution of a Railway Board, which, with some modifications, have now received his sanction.

3. There are two distinct classes of duties with which the new authority will have to deal. The first is deliberative and includes the preparation of the railway programme and the greater questions of railway policy and finance affecting all lines. The ultimate decision on such questions must of necessity rest with the Government of India.

The second class of duties is administrative, and includes such matters as the construction of new lines by State Agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, and the settlement of disputes between railways. It is in respect to these duties that the greatest advantage in the establishment of an authority outside the Government of India is looked for.

4. The Railway Branch of the Public Works Department of the Government of India will be abolished, and the control of the railway system in India

APPENDIX 41—*concld.*

is hereby entrusted to a Railway Board consisting of three persons—a Chairman and two Members. In the Chairman of the Board is vested the general control of all questions committed to the Railway Board, and the power to act on his own responsibility, subject to the confirmation of the Board. The Railway Board are also authorised to delegate to the Chairman or a Member the power of settling questions which may arise on any tour of inspection, such decision to be recorded subsequently as an act of the Railway Board.

5. The Railway Board will be provided with a Secretary and such establishment as may be considered necessary for the conduct of their business. All correspondence hitherto addressed to the Secretary, Public Works Department, Railway Branch, Government of India, and to the Directors of Railway Traffic and Construction, will in future be addressed to the Secretary to the Railway Board. Communications from public bodies interested in railway questions should also be addressed to the Board, either direct or through the Local Government concerned.

6. The Government of India desire that all orders which the Railway Board may issue shall be accepted as the orders of the Government of India. Separate orders will issue investing the Railway Board with certain of the functions of the Governor-General in Council under the Indian Railways Act (IX of 1890), as soon as the necessary legislation has been carried out. The responsibility of acting in accordance with the policy desired by the Government of India, rests with the Board and their advisers.

7. The head-quarters of the Railway Board will be at the head-quarters for the time being of the Government of India.

ORDER.—Ordered that this Resolution be communicated to all the Departments of the Government of India, and to the Local Governments, Administrations and Officers, noted on the margin. Also that it be published in the *Gazette of India*.

The Governments of Madras and Bombay, Public Works Department, General and Railway Branches.
The Governments of Bengal, the United Provinces of Agra and Oudh, and the Punjab, Public Works Department.
The Government of Burma, Public Works Department, General and Railway Branches.
The Honourable the Chief Commissioners of the Central Provinces and Assam.
The Chief Commissioner of Coorg.
The Honourable the Resident at Hyderabad.
The Honourable the Agents to the Governor General for Central India, Rajputana and Baluchistan.
The Honourable the Agent to the Governor General and Chief Commissioner, North-West Frontier Province.
The Accountant General, Public Works Department.
The Director General of Military Works.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Assam.
The Director General of Telegraphs.
The Managers, North Western, Oudh and Rohilkhand, and Eastern Bengal State railways.
The Engineers-in-Chief, Ganges Bridge and Agra-Delhi Chord railway.
The Engineer-in-Chief, Murshidabad Branch, Eastern Bengal State railway.
The Engineer-in-Chief, Nagda-Muttra railway survey.

APPENDIX 42.

Amendment in rule 3 of Chapter III, Part I, of the General Rules for working open lines of railway.

CIRCULAR No. R. T. 62.

RAILWAY BOARD.

Simla, the 1st June 1905.

READ—

Section 47 of the Indian Railways Act, 1890 (IX of 1890).

Government of India, Public Works Department notification No. 118, dated the 21st March 1895, and the Government of India circular No. 6 Railway, dated the 12th March 1895, published thereunder.

Government of India, Department of Revenue and Agriculture memorandum No. 436-71-17, dated the 21st February 1905.

Government of India, Department of Commerce and Industry notification No. 801, dated the 24th March 1905.

Railway Board's letter No. R. T. 62, dated the 20th April 1905.

RESOLUTION.

The Government of India having decided, after consulting the several Railway Administrations, to introduce upon all railways (other than local disconnected lines where the change would be inconvenient) and in all telegraph offices, a Standard time which will in India be exactly 5½ hours in advance of Greenwich and 9 minutes in advance of Madras time and in Burma 6½ hours ahead of Greenwich and 5 minutes 23 seconds earlier than present Rangoon time, the necessary instructions were issued to all Railway Administrations concerned to introduce the Standard time at midnight between the 30th June and the 1st July 1905. This has necessitated an amendment of rule 3 of Chapter III, Part I, General Rules for working open lines of railway in India, which prescribes the use of Madras time.

2. In exercise of the powers conferred by the notification of the Government of India in the Department of Commerce and Industry, No. 801, dated the 24th March 1905, read in the preamble above, the Railway Board are pleased, under section 47, sub-section (4) of the Indian Railways Act, 1890 (IX of 1890), as in force in British India or as locally applied, to sanction the adoption on and from the 1st July 1905 by the Administrations of the Railways concerned, whether in British India, in foreign territory or in Native States, to which the General Rules for working open lines of railway, promulgated with the Government of India circular No. 6 Railway, dated the 12th March 1895, apply, of the accompanying amendment in rule 3 of Chapter III, Part I, of the said General Rules.

Order.—Ordered that this circular, with its enclosure, be published under a notification in Part I of the *Gazette of India* as required by section 47, sub-section (3), of the Indian Railways Act, 1890 (IX of 1890), and that a copy

thereof be kept open for inspection at railway stations as directed by sub-section (6) of the same section; also that a copy of this circular and of its enclosure be communicated to the Local Governments and Administrations, and to the officers noted in the margin, for information and guidance; and to the Governments of the United Provinces and of the Punjab, the Honourable the Chief Commissioner of the Central Provinces, the Honourable the Resident in Mysore, the Honourable the Agents to the Governor General in Central India and Baluchistan, the Honourable the Agent to the Governor General and Chief Commissioner of the North-West Frontier Province, and the Accountant General, Public Works Department, for information.

The Governments of Madras, Bombay, and Burma, Public Works Department, Railway Branch.

The Government of Bengal, Public Works and Marine Departments.

The Honourable the Chief Commissioner of Assam.

The Honourable the Resident at Hyderabad.

The Honourable the Agent to the Governor General for Rajputana.

The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Assam.

The Managers, North Western, Oudh and Rohilkhand and Eastern Bengal (State) Railways.

Document accompanying.

Corrigendum referred to.

Enclosure to Railway Board's circular No. R. T. 62, dated the 1st June 1905.

Amendment in rule 3 of Chapter III, Part I, of the General Rules for working open lines of railway, promulgated with the Government of India, Public Works Department circular No. 6 Railway, dated the 12th March 1895.

In rule 3 of Part I, for the words "Madras time," *read* "Standard time."

APPENDIX 43.

Proposals relating to projects for new railways or extensions of existing railways.

No. R. C. 313.

RAILWAY BOARD.

To

THE GOVERNMENTS OF MADRAS AND BOMBAY, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE GOVERNMENTS OF BENGAL, THE UNITED PROVINCES OF AGRA AND OUDH, AND THE PUNJAB, PUBLIC WORKS DEPARTMENT.

THE GOVERNMENT OF BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE HONOURABLE THE CHIEF COMMISSIONERS OF THE CENTRAL PROVINCES AND ASSAM.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE RESIDENT IN MYSORE.

THE HONOURABLE THE AGENTS TO THE GOVERNOR-GENERAL FOR CENTRAL INDIA, RAJPUTANA AND BALUCHISTAN.

THE HONOURABLE THE AGENT TO THE GOVERNOR-GENERAL AND CHIEF COMMISSIONER, NORTH-WEST FRONTIER PROVINCE.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA, LUCKNOW AND ASSAM.

THE MANAGERS, NORTH WESTERN, OUDH AND ROHILKHAND, AND EASTERN BENGAL STATE RAILWAYS.

Simla, the 23rd June 1905.

SIR,

I am directed to say that the Railway Board would be glad if Local Governments would, at any time, send forward proposals relating to projects for new railways, or extensions of existing railways, which they may consider to be desirable in the interests of the various Provinces. It is suggested that the Local Governments should enter into direct consultation with the Railway Administrations likely to be affected by the construction of the lines which may be proposed.

APPENDIX 44.

Revised form of agreement for extensions of railways into private premises.

No. R. T. $\frac{35}{8}$.

RAILWAY BOARD.

To

(i) The Manager, North Western Railway.

(ii) „ „ Oudh and Rohilkhand Railway.

(iii) „ „ Eastern Bengal State Railway.

Simla, the 28th July 1905.

Sir,

With reference to correspondence ending with (i) and (ii) Government of India, Public Works Department, letter No. 989 R. T., dated the 23rd October 1902 (iii) Railway Board's letters Nos. 181 R. T. and R. T. 35, dated, respectively, the 2nd March and 5th June 1905, I am directed to request you to substitute the accompanying form for that now in use for extensions of the railway into private premises.

2. I am to add that the revised form is intended as a guide and that the Railway Board will be pleased to consider any modification of the terms necessary to meet particular cases.

Document accompanying.

Revised form of agreement referred to.

No. R. T. $\frac{35}{8}$, dated Simla, the 28th July 1905.

Copy, with copy of the enclosure referred to, forwarded to the Local Governments and Administrations and to the officers noted on the margin, for information and guidance, with reference to correspondence ending with (i) to (vii) and (ix) and (x) Government of India, Public Works Department, letter No. 989 R. T., dated the 23rd October 1902 (viii) Government of India, Public Works Department, letter No. 1350 R. C., dated the 18th August 1904. and with the remark that the revised form of agreement now approved for State Railways may be taken as a general guide in preparing similar agreements.

(i) to (iii) The Secretaries to the Governments of Madras, Bombay and Burma, Public Works Department, Railway Branch.

(iv) The Secretary to the Government of Bengal, Public Works Department.

(v) The Honourable the Chief Commissioner of Assam.

(vi) The Honourable the Resident at Hyderabad.

(vii) The Honourable the Agent to the Governor General for Rajputana.

(viii) to (x) The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Assam.

2. Should any modification of the terms be considered desirable, recommendations to meet the requirements of particular cases will receive the consideration of the Railway Board.

APPENDIX 44—*contd.*

STATE RAILWAY.

Revised form of Agreement approved by the Railway Board for Extensions of the State Railway into private premises.

The Railway Administration will undertake the survey, construction and equipment of sidings leading from the main line, the sidings or stations of the railway for the traffic from Mills or other industries in the vicinity of the railway on the following conditions :—

Survey and Construction.

1. On the application and signature of the form of acceptance at the foot of these conditions, by the owners of a Mill or other industry (throughout these conditions referred to as the applicants) and on payment by them in advance of Rs. 200 for the first mile or part of a mile of siding required and Rs. 50 for every quarter mile or fraction thereof in excess of one mile, a survey for the siding to be constructed will be made by the Railway Administration. The above charge will cover the cost of preparation of the necessary plans and estimates, single copies of which will be sent to the applicants on completion. Applicants who require alterations to the plans which involve more survey work will have to pay as for a fresh survey.

2. Plans and estimates for the siding, in which shall be included the estimate of the cost of the acquisition of the land, will be subject to the sanction of the Railway Board, which sanction will be applied for by the Railway Administration as soon as the applicants have complied with the requirement of the 4th condition as to the amount to be deposited.

3. The land required for the siding outside the railway boundaries will be acquired by Government under the Land Acquisition Act. Land so acquired will vest absolutely in Government and the applicants will have no right or claim thereto.

4. On receipt of a statement of the advance required by the Railway Board to be made for such purposes as they may think necessary, including the estimated cost of acquisition of the land by Government, the applicants will deposit the amount thereof with the Railway Administration, and the Railway Administration will, on the plans and estimates for the siding being sanctioned by the Railway Board, proceed to the acquisition of the land. If the amount expended by the Railway Administration for the purposes mentioned in the said statement shall exceed the amount of the deposit by the applicants under this condition, the applicants will pay the Railway Administration on demand the amount of such excess.

5. The work to subgrade of the siding, that is, earthwork, bridging, ballast, etc., will be carried out at the expense of the applicants, but may, with the sanction of the Railway Administration, if so desired, be done by the applicants. Such work, if done by the applicants, shall be in accordance with the plans and specifications prepared by the Railway Administration and shall be approved by the Engineer of the Railway Administration before the rails are laid. Should the applicants, on undertaking to do the work, require the help of the staff of the Railway Administration in surveying or setting out the earthwork, etc., a charge of Rs. 32 will be made for each day or part of a day that the staff is so employed. If the subgrade work is carried out by the Railway Administration the applicants shall deposit beforehand the estimated cost of it, including a charge for supervision at 17 per cent. on the total amount of the estimate, excluding all stores issued from stock and freight charges on the same—stores issued from stock will be charged at the booked rates, as shown in the railway priced ledgers, plus a sum of 10 per cent. for stores supervision—and agree to pay on demand any excess expenditure over the estimate that may be incurred by the Railway Administration in the actual execution of the work.

APPENDIX 44—*contd.*

Maintenance of the siding.

6. The ordinary maintenance of all work to subgrade shall be done by, or at the expense of, the applicants, the supervision by the Railway Administration, where required, being paid for as provided in clause 5. Such emergent maintenance as the safety of the lines worked over by the railway demands will be done, as required by the Railway Administration, and the applicants agree by the acceptance of these terms to pay on demand any expenditure incurred by or through the Railway Administration on this account.

7. On completion, to the satisfaction of the Railway Administration, of the subgrade work, including provision of ballast, the permanent-way materials, that is, sleepers, rails, fastenings, points and crossings will be provided, laid and maintained by the Railway Administration free of charge. The Railway Administration will further provide free of charge the girder work of bridges and any station machinery necessary.

8. In the event of the applicants abandoning the use of the siding, or in the event of the traffic to and from the siding being at any time in the opinion of the Railway Board insufficient to justify the continuance of the siding as such, the Railway Administration will be at liberty on giving to the applicants 30 days' notice to remove the permanent-way materials and all girder work and machinery provided by the Railway Administration from the siding; provided that if the applicants shall be desirous of keeping the siding open for traffic, and shall intimate their desire to the Railway Administration before the removal of the permanent-way materials, girder work or machinery shall have commenced, the Railway Administration will continue to so maintain the siding on condition that the applicants pay half-yearly any expense entailed on the Railway Administration by the siding being so kept open. If the permanent-way materials or the girder work or station machinery or any portion thereof shall be removed by the Railway Administration in exercise of the liberty reserved in this condition, the cost of such removal will be borne by the applicants and be paid by them to the Railway Administration on demand.

9. The Railway Board may at any time construct or permit the construction of any branch or extension of the siding, and may work traffic over the siding to and from such branch or extension. The Railway Board may sanction the use of the siding for the traffic of persons other than the applicants on payment to the applicants of a remuneration for such use, the amount of such remuneration to be determined by the Railway Administration. The working of such branch or extension, and the use of the siding by persons other than the applicants will be so conducted as to interfere as little as possible with the free use of the siding by the applicants, whose traffic shall have precedence.

10. If it shall become necessary to extend the siding beyond the land acquired by Government into the premises of the applicants, such extension will be constructed by the applicants in accordance in all respects with plans approved by the Railway Administration, and at the cost of the applicants. The entire cost of working such extension will be borne and paid by the applicants, and all property of the Railway Administration, while on such extension, will be at the entire risk of the applicants. If desired by the applicants, the Railway Administration will undertake to supply all labour for the maintenance of those portions of the siding situated within the premises of the applicants for a monthly payment by the applicants to the Railway Administration of Rupees 32 per mile of siding maintained, subject to a minimum charge as for half a mile. For lengths over half a mile, the charges will be as for $\frac{3}{4}$, 1, $1\frac{1}{4}$ miles, etc., increasing by $\frac{1}{4}$ mile increments. Materials required for such renewals, as may be necessary on the portion so maintained, will be supplied by the Railway and charged to the applicants at the rates shown in the Railway priced ledgers *plus* a sum of 10 per cent. for stores supervision: all unserviceable material removed from portions of the siding so maintained shall be handed over to the applicants. In the case of sidings constructed throughout at the cost of applicants under clause 5, the same scale of charges will apply to the maintenance of the siding by the Railway.

APPENDIX 44—*contd.*

11. If so desired by the Railway Administration, a weigh-bridge and weigh-bridge siding shall be provided. Such weigh-bridge siding will be constructed by the Railway Administration or by the applicants, as the case may be, upon and in accordance with the foregoing conditions governing the construction of the original siding, and on completion of the works of the siding up to sub-grading, the weigh-bridge and the permanent-way materials necessary for such siding will be provided, laid and maintained by the Railway Administration. If for the purpose of constructing such weigh-bridge and siding any land outside the boundaries beyond that acquired by Government for the original siding shall be required the foregoing conditions regarding the acquisition of land for the original siding shall apply to the acquisition of such additional land.

12. If a weigh-bridge or weigh-bridge siding shall be constructed, the applicants will provide quarters for a weigh-clerk, and all labour from time to time necessary for the proper performance of the operation of weighing within the free time allowed for the use of wagons. The weigh-clerk will be a servant of, and paid by, the Railway Administration.

13. In the event of its being necessary, subsequent to the original construction of the sidings, to make any alterations or additions thereto, or to provide such items as fencing, signals or improved safety appliances, or machinery of any kind, or to provide quarters for signallers or staff for the working of the siding, such additional works shall be provided, subject to the general conditions governing the original construction, that is, the cost and maintenance of works to subgrade, or of works that would be abandoned if the siding were closed, shall be borne by the applicants and the cost of permanent-way materials, station machinery, signals and such items of works, supplied at the cost of the Railway Administration as would be removed by the Railway Administration in the event of the siding being abandoned, shall be borne by the Railway Administration. No addition or alteration shall be made to the siding by the applicants without the written sanction of the Railway Administration, nor without such sanction shall any temporary or permanent structure be erected by the applicants in such proximity to the siding as to effect in any way the working of trains over the siding. All sanctioned additions or alterations to the siding made by the applicants, and all sanctioned structures erected by the applicants shall be made or erected in all respects in compliance with the regulations of the Railway Administration for the time being in force.

14. All sums, which under the foregoing conditions shall be payable by the applicants on demand, shall if not so paid bear interest at 10 per cent. per annum from date on which payment was demanded.

Traffic Working.

15. Freight for all classes of goods, up to and from the station at which the siding takes off, will be charged in accordance with the rates from time to time published in the goods tariff of the Railway Administration and, in addition, for hauling loaded wagons over the siding to or from the Mills, the following charges will be made by the Railway, the distance for charge in all cases being for a minimum of 1 mile—

0·25 pie per maund per mile for jute, with the usual discount for bales.

Classified rates as notified in the tariff for all other articles, including coal and coke or patent fuel.

No charge will be made for hauling empty wagons over the siding.

16. Wagons are to be made over at the Mills, and returned by the Mills in the form of certificate shown in Annexure A.

17. Wagons will be hauled by the Railway to and from the Mill gates, or some other point fixed upon by the mutual consent of the applicants and

APPENDIX 44—*contd.*

the Railway Administration, the former undertaking to shunt the wagons from there to the Mill premises and back.

18. The applicants will see that the rules and regulations of the Railway Administration are strictly adhered to by their employés, and will be responsible for all accidents or loss or damage that may ensue from the neglect or disobedience of such rules and regulations by the employés. It will be the duty of the applicants to obtain all such rules, and to see that their employés are made acquainted with them.

19. As soon as the wagons are placed at the Mill gates, or any other point mutually agreed upon, the station master will, after filling up Parts I and II of Annexure A, have Part I signed by the consignee, and himself sign Part II, and make it over to the consignee with Part III, when they will be considered as made over to the Mills, and from that time the free time allowed to them will commence; similarly, the wagons will be considered as returned to the Railway Administration as soon as they are placed at the Mill gates, or some other appointed place, after being unloaded which will be intimated to the station master by the consignee on Part III of Annexure A, which will be filled up by the latter, and signed both by consignee and station master in each other's presence.

20. The applicants will be held responsible for any damages which the wagons may sustain during the period they remain under their charge, and will be liable for the cost of re-railing wagons derailed on portions of the siding maintained by them and for repairs to the siding.

21. The free time allowed to the applicants on wagons and the demurrage charges leviable will be governed by the rules issued from time to time in the Goods Tariff book of the Railway Administration.

22. No traffic other than that which may properly be connected with the working or requirements of the Mill or industry of the applicants, shall, except with the written permission of the Railway Administration, be at any time taken or sent by the applicants over the siding. No consideration or remuneration of any nature, except such as may be contained in a written permission of the Railway Administration shall be received or taken by the applicants in respect of traffic over the siding.

To THE MANAGER,

State Railway.

_____ *190* .

DEAR SIR,

We accept the above terms for the construction, working and maintenance of the siding asked for by us_____

_____

at mile_____on the_____of the_____State Railway.

*Dated*_____ *190* .

ANNEXURE A.

—S. Ry.—*Voucher for consignments unloaded in private sidings.*

PART I.

OFFICE COPY.

Station_____

Date_____

Hour_____

Railway Receipt No._____

Consignee_____

Wagon Nos.	Arrived.		Placed.		Remarks.
	Date.	Hour.	Date.	Hour.	

*Station Master*_____ *Consignee*_____

*Date*_____

—S. Ry.—*Voucher for consignments unloaded in private sidings.*

(D)

PART II.

CONSIGNEE'S NOTICE.

Station_____

Date_____

Hour_____

Railway Receipt No._____

Consignee_____

Wagon Nos.	Arrived.		Placed.		Remarks.
	Date.	Hour.	Date.	Hour.	

*Station Master*_____

*Date*_____

—S. Ry.—*Voucher for consignments unloaded in private sidings.*

PART III.

CONSIGNEE'S CERTIFICATE AND RELEASE.

Station_____ Date_____

Receipt No._____ Hour_____

Wagon Nos.	(1) Released.		(2) Time allowed.		(a) Time taken.		(b) (c) Remarks.
	Date.	Hour.	Date.	Hour.	Date.	Hour.	

*Station Master*_____

*Consignee*_____ *Consignee*_____

*Date*_____ *Date*_____

APPENDIX 45.

Rates and conditions for the carriage of coal for the general public and for State or other Railways.

Circular No. R.T. 29.

RAILWAY BOARD.

RAILWAY TRAFFIC.

To

THE SECRETARIES TO THE GOVERNMENTS OF MADRAS, BOMBAY AND BURMA, PUBLIC WORKS DEPARTMENT, RAILWAY BRANCH.

THE SECRETARY TO THE GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT.

THE SECRETARY TO THE GOVERNMENT OF BENGAL, MARINE DEPARTMENT.

THE HONOURABLE THE CHIEF COMMISSIONER OF ASSAM.

THE HONOURABLE THE RESIDENT AT HYDERABAD.

THE HONOURABLE THE AGENT TO THE GOVERNOR GENERAL FOR RAJPUTANA.

THE ACCOUNTANT GENERAL, PUBLIC WORKS DEPARTMENT.

THE CONSULTING ENGINEERS TO THE GOVERNMENT OF INDIA FOR RAILWAYS, CALCUTTA AND LUCKNOW.

THE DIRECTOR GENERAL OF TELEGRAPHS.

THE MANAGER, NORTH WESTERN, OUDH AND ROHILKHAND AND EASTERN BENGAL (STATE) RAILWAYS.

Simla, the 26th August 1905.

SIR,

In Government of India letter No. 547 R. T., dated the 8th July 1897, it was ruled that the rates quoted in the Schedules to Government of India Circular No. 8 Railway, dated the 4th May 1895, were maximum rates, the minimum rate on railways for which a minimum has been prescribed, being $\frac{1}{10}$th pie per maund per mile.

2. The Railway Board consider that this minimum restricts trade in places distant from the coal-fields, and they accordingly authorise, subject to the conditions enumerated below, the adoption of the following minimum rates:—

	Per maund per mile.
For distances up to 300 miles	$\frac{1}{10}$th pie or 0·10
Plus for any distance in excess of 300 miles and up to 500 miles inclusive.	$\frac{1}{15}$th pie or 0·066
Plus for any distance in excess of 500 miles ...	$\frac{1}{20}$th pie or 0·05

Condition 1.—That the rate shall be calculated on the through distance between the station of origin and the station of destination of the consignment.

Condition 2.—That when there are two or more routes to destination from the colliery where the traffic originates the railway or railways forming the longer route may calculate charges on the same mileage as the railway or railways forming the shorter route.

Condition 3.—That coal for the use of foreign railways is charged at the same rates and under the same conditions as coal carried for the public.

Condition 4.—That the rates charged are divided between the railways over which the traffic is carried in proportion to the mileage of each, provided that if the distance the coal is carried over any railway is less than 25 miles, the mileage of that railway in dividing the freight shall be reckoned as 25 miles.

Condition 5.—That these rates shall be subject to revision at the end of three years from the 1st of September 1905.

APPENDIX 46.

Construction of wagon frames and bodies of wagons for State railways in India.

No. R. S. 107-1.

RAILWAY BOARD.

To

THE MANAGER, NORTH WESTERN RAILWAY.

THE MANAGER, OUDH AND ROHILKHAND RAILWAY.

THE MANAGER, EASTERN BENGAL RAILWAY.

Dated Simla, the 11th September 1905.

SIR,

I am directed to inform you that the Railway Board have received representations from various firms of Manufacturing Engineers in India, who ask that they may be given the opportunity of tendering for the construction of wagon frames and bodies in this country. After giving the matter their full consideration, the Railway Board have come to the conclusion that they are justified in placing Indian firms in a position to develop this class of work, and they desire that the arrangement indicated below shall be adopted and shall continue for a period of three years :—

2. When sanction has been given to the purchase of goods stock, tenders shall be called for publicly in India for the supply of twenty-five per cent. of the stock sanctioned.

3. Tenders shall be confined to the supply of frames and bodies only. The requisite wheels, axles, springs and draw-bars to complete the wagons shall be indented for from England, and shall be supplied by the railway administration to the firm whose tender has been accepted.

4. Tenders should be for wagons erected complete on rails.

5. The firms tendering should bind themselves to deliver the wagons within a specified time.

6. The work done and the material used shall be subject to the conditions laid down in Public Works Department Code, Volume II, Appendix 30, paragraph 7. Tenders shall be accepted only from firms whose names are entered in Schedule B attached to that Appendix, as corrected from time to time by order of the Government of India ; and the work shall be subject to the specifications and tests prescribed in Schedule C attached to that appendix, and to the same kind of inspection as that provided for in tenders for similar work called for in England.

7. Subject to the material being satisfactory, iron and steel of Indian manufacture should be used whenever possible.

8. Tenders should be submitted by Managers to the Railway Board for approval before acceptance.

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